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TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1939

No. 536

ETHYL GASOLINE CORPORATION, EARLE W. WEBB AND JOHN COARD TAYLOR, APPELLANTS,

vs.

THE UNITED STATES OF AMERICA

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK

FILED NOVEMBER 16, 1939.

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IN UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

Equity No. E. 84-321

UNITED STATES OF AMERICA, Petitioner,

v.

ETHYL GASOLINE CORPORATION, EARLE C. WEBB, and JOHN COARD TAYLOR, Defendants

PETITION—Filed February 19, 1937

To the Honorable the Judges of the District Court of the United States for the Southern District of New York, in Equity:

The United States of America, by its attorneys, brings this suit in equity against Ethyl Gasoline Corporation, Earle C. Webb, and John Coard Taylor, defendants, and alleges:

1. Defendant Ethyl Gasoline Corporation is a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having its principal place of business at 135 East 42nd Street, in the City and State of New York. One-half of its capital stock is owned by the Standard Oil Company (New Jersey), and the remainder is owned by General Motors Corporation and E. I. du Pont [fol. 3] de Nemours Company. Defendants, Earle C. Webb and John Coard Taylor, are president and vice-president in charge of sales, respectively, of Ethyl Gasoline Corporation. Defendant Webb is a citizen of the State of Connecticut and resides in the City of Greenwich in that State. Defendant Taylor is a citizen of the State of New Jersey and resides in the City of Montclair in that State.

2. The purpose of this suit is to enjoin and restrain defendants and each of them, from further violations of the Act of Congress of July 2, 1890, known as the Sherman Anti-trust Act.

3. The unlawful combination, conspiracy, and monopoly hereinafter described has operated, and has been carried on in part within the Southern District of New York, and

many unlawful acts pursuant thereto have been performed by defendants and others in said district. The interstate commerce in gasoline hereinafter described is carried on in part within said district.

4. Defendant corporation has been for a number of years continuously engaged in the production and sale of a substance (hereinafter referred to as "ethyl fluid") for use in increasing the octane, or anti-knock, rating of motor fuel, principally gasoline. Said ethyl fluid consists principally of tetraethyl lead, which said substance has the effect, when a relatively minute quantity thereof is mixed with gasoline, of reducing or preventing the "knocking" which sometimes takes place in the course of the combustion of ordinary [fol. 4] gasoline in automobile motors of high compression. Defendant corporation is the sole producer of ethyl fluid in the United States, being or claiming to be the owner of exclusive rights under certain letters patent of the United States purporting to cover the manufacture, use and sale of said ethyl fluid. No other substance of like character is manufactured or sold. The use of improved refining processes, such as so-called "cracking" processes, to raise the octane rating of gasoline sufficiently to meet prevailing competitive standards involves the acquisition of expensive patented apparatus and is so costly that said processes are not practically competitive with the use of ethyl fluid.

5. Defendants do not manufacture, refine or sell any gasoline, or mix ethyl fluid with gasoline, and do not own any part of, or interest in, any of the gasoline which is treated with ethyl fluid.

6. More than 85% of all gasoline sold in the United States which is processed so as to obtain a high octane rating is treated with ethyl fluid. Approximately 70% of all gasoline manufactured and sold in the United States is treated with ethyl fluid. By reason of these facts, and by reason of the control exercised by defendant corporation over the manufacture and sale of ethyl fluid, said defendant possesses the power, unless the activities hereinafter described are restrained, in effect, to control and regulate the price and the manner of sale of the greater part of all gasoline sold throughout the United States.

[fol. 5] 7. Gasoline is manufactured from crude petroleum at refineries located in various states of the United States,

principally the States of Texas, Oklahoma, California, Illinois, Indiana, Missouri, New Jersey, Pennsylvania, and New York. The greater part of all gasoline manufactured at such refineries, and the greater part of all gasoline treated with ethyl fluid, as aforesaid, is sold and transported in interstate commerce from the States in which such refineries are located into each of the other States of the United States, including the State of New York and the Southern District thereof, wherein such gasoline is sold for consumption. Said gasoline is sold by the refining companies in part through wholesale and retail outlets owned or controlled by them, and in part to so-called jobbers for resale to retail dealers and consumers.

8. Jobbers usually own and operate bulk storage plants conveniently located so as to serve such gasoline, by their tank trucks or tank wagons, to retail service stations, either owned or operated by them, or independently owned or operated by retail dealers, in the various marketing territories served by them. There are approximately 12,000 jobbers of gasoline doing business in the several States of the United States, who distribute a great part of all gasoline sold and distributed in the United States. The greater part of all gasoline, and of the gasoline treated with ethyl fluid, as aforesaid, purchased by said jobbers is purchased by [fol. 6] them in tank car quantities, and is delivered to them from the States in which said gasoline is refined to the States in which said jobbers are engaged in business, and a large part of such gasoline sold by jobbers is sold and distributed by them in interstate commerce from the States in which their said bulk storage plants are located to service stations located in other States.

9. Defendants, each well knowing all the matters of fact hereinbefore alleged, have been engaged in an unlawful combination, conspiracy, monopoly, and attempt to monopolize, in violation of the Sherman Antitrust Act, whereby said defendants have adopted and put into effect certain licensing policies and practices hereinafter referred to, and have attempted to control and regulate, have in fact controlled and regulated, and have unlawfully restrained, the manner of sale and the prices of the greater part of all gasoline sold in interstate commerce in the United States. Defendants have, as part of said unlawful activities and the purposes and objectives thereof, conspired and combined

with numerous refiners of gasoline throughout the United States as hereinafter more fully alleged. Said violations of law are more fully described as follows:

10. Defendant corporation, acting with and through its officers named as defendants herein and others of its officers and employees, has entered into numerous agreements with refiners of gasoline pursuant to which ethyl fluid is sold [fol. 7] outright by defendant corporation to said refiners from time to time, and said refiners are licensed to use said ethyl fluid and to sell the same when mixed with gasoline. Said license agreements purport to authorize said refiners to treat the gasoline manufactured by them with sufficient ethyl fluid (not exceeding 3 cubic centimeters per gallon of gasoline) to produce a grade of gasoline having an octane rating of not less than 76 (such gasoline being known as premium or "ethyl" grade of gasoline), or a grade of gasoline having an octane rating not in excess of 70 (such gasoline being known as regular gasoline and sometimes referred to by defendants as "Q" gasoline). Said license agreements impose restrictions upon the refiner licensees with respect to the prices at which the premium or Ethyl grade of gasoline may be sold by them to jobbers, dealers and consumers. Said license agreements impose the further restriction as to regular gasoline that said regular gasoline shall be sold by the refiner as the next highest priced motor fuel below the refiner's Ethyl gasoline, and shall be the refiner's best non-premium gasoline.

11. An average of approximately .85 cubic centimeters of ethyl fluid per gallon, or one part of ethyl fluid to 4400 parts of gasoline, is required to produce regular gasoline. Usually the quantity of ethyl fluid required to produce premium gasoline is approximately 2.25 cubic centimeters per gallon of gasoline, or one part of ethyl fluid to 1700 parts of gaso- [fol. 8] line. Nearly all (more than 96%) of the gasoline treated with ethyl fluid is regular gasoline.

12. The names of refiners who have entered into said license agreements are too numerous to set out herein, there being approximately 123 such refiner licensees, who together refine, sell and control more than 85% of all gasoline sold in the United States. Copies of typical forms of such refiner license agreements employed by defendant corporation are attached hereto and marked Exhibits A, B, and C, respec-

tively. All except one of the major (i. e. large, integrated) refiners of gasoline in the United States have entered into such license agreements with defendant corporation, and all except one of said major company licensees treat with ethyl fluid their regular or so-called house brands of gasoline, which constitute more than 90% of all gasoline manufactured and sold by each of said major company licensees.

13. Each of said refiner license agreements contains the express provision, and defendant corporation and each of the refiner licensees have agreed with each other, that the latter will sell gasoline treated with ethyl fluid only to those jobbers who shall have been licensed by defendant corporation to handle such gasoline. Jobbers have been licensed by defendant corporation, acting with and through its officers named as defendants herein, and others of its officers and employees, under two forms of licenses, one purporting to license the handling of premium or Ethyl and the other of regular gasoline. Copies of each of said forms of [fol. 9] licenses are attached hereto and marked Exhibits D and E, respectively. Jobbers desiring to apply for such licenses are required to apply through their respective refiners suppliers, who, in turn, submit such jobber applications to defendants. Very often the same jobbers have been licensed under both forms of licenses. Approximately 10,000 jobbers have been granted such licenses by defendants. Numerous applications for jobber licenses have been denied. Apart from the issuance of such licenses to said jobbers (through their respective refiner suppliers, as aforesaid) and the investigation thereof hereinafter described, defendant corporation does not have any business relations with any of said jobbers.

14. Said jobber licenses purport to be aimed at the protection of health and the maintenance of quality of gasoline treated with ethyl fluid. The addition of ethyl fluid to gasoline, however, does not cause or produce any dangers or hazards to health, the Ethyl and regular gasoline being in no respect more dangerous to health than ordinary untreated gasoline. No authentic cases of lead poisoning, or other injury to health from such lead treated gasoline, have ever been discovered. Also, defendants have not employed or required the use of any trade name or trade mark in connection with regular gasoline, and have established no trade reputation in connection with such gasoline. No minimum

octane requirement is specified by the defendants with re- [fol. 10] spect to such gasoline and the maintenance of quality thereof is not, actually or in practice, a factor in defendants' licensing policy.

15. Defendants have employed said jobber licenses, and their power to grant or withhold the same, so as to require and compel jobbers purchasing outright any gasoline treated with ethyl fluid to maintain so-called "business ethics", a term employed by defendants to denote compliance with approved marketing policies of the major oil companies, or the market leaders among such major oil companies, and particularly the maintenance by jobbers, and retail dealers who in turn purchase such gasoline outright from jobbers, of the retail prices for gasoline posted by said major oil companies or market leaders. Defendants have refused to grant licenses to a large number of jobbers who do not abide by said approved marketing policies or do not maintain said major oil company prices, and they have required and compelled jobber licensees, under threat, or apparent threat of revocation of said licenses or refusal to renew said licenses, to maintain, and to see to it that their retail dealer outlets maintain, said approved marketing methods and practices and prices of said major oil companies or market leaders. Each jobber license contains a provision whereby defendant corporation is authorized to cancel said license, without stating any reasons therefor, at any time upon thirty days' notice.

16. In order to effectuate said policies, and said control and restrictions upon jobbers and their retail dealers, de- [fol. 11] fendants have organized and maintained an extensive system of investigation of the practices and prices maintained by jobbers in their retail outlets or those maintained by the retail dealers to whom they sell. Ostensibly such investigations, whether of jobber licenses or of applicants for jobber licenses, have been made for the purpose of protecting the quality of gasoline treated with ethyl fluid or of discovering possible health hazards in the sale of such gasoline, but in fact the primary purpose of said investigations, and the only substantial purpose thereof, has been as aforesaid, to effectuate the unlawful control of and restrictions upon, said jobbers and their retail dealers above described. By reason thereof, regular investigators, or field representatives, in the employ of defendant corpo-

ration have been instructed not to report their findings in writing, and the purposes and results of said investigations have been concealed. Usually no records have been made or preserved disclosing the aforesaid true reasons, or any reasons, why licenses to jobbers have been refused. Said investigators or field representatives are many in number, are located throughout the United States, and exercise wide discretion and authority in determining the granting or refusal of jobber licenses; usually the mere decision of the field investigator as to the applicant's "business ethics", without supporting data, has determined whether a license would be granted.

[fol. 12] 17. Refiners generally, as well as jobbers, know and understand that jobber licensees, and their dealers, are required to maintain prices as aforesaid and to abide by the marketing practices and methods of the major oil companies as aforesaid, and jobber licensees generally have accordingly conformed to these requirements.

18. As part of said unlawful policies, defendants have from time to time required that each jobber licensee contract to purchase all his requirements of gasoline from one refiner supplier. Similarly defendants have employed the power inherent in said jobber licensing system to enforce supply contracts of jobbers with refiners, and they have refused to license jobbers who desired to change their sources of supply, upon the ground that said jobbers were under contract to purchase from their existing refiner suppliers, even where said jobbers have contended that such contracts had been abrogated, or for other reasons were not enforceable against them.

19. Defendants' policies and practices with respect to jobbers have abused, and gone beyond the scope of, any patent rights defendants may own or control, and have constituted an unlawful exercise of future control over what purchasers may wish to do with gasoline which they have purchased outright for full consideration. Acting in concert, and in combination with said refiner licensees, as aforesaid, defendants have employed said jobber licenses almost exclusively for the purpose, and with the effect, [fol. 13] of controlling and regulating the marketing of gasoline throughout the United States, and they have attempted to control, and have, in fact, controlled and regu-

lated the marketing policies of, and prices charged for gasoline at retail by, jobbers and their dealers. The aforementioned restrictions upon refiner licensees, and particularly those inuiting and selecting the jobbers to whom said refiners may sell gasoline treated with ethyl fluid, have not been normally and reasonably adapted to secure pecuniary reward to which defendants may be justly entitled by reason of any patent rights. Defendants have thereby substantially monopolized and restrained trade among refiners, jobbers and dealers in the sale of gasoline in interstate commerce as aforesaid, all in violation of the Act of Congress of July 2, 1890.

20. Defendants are now engaged in said unlawful acts and practices and threaten to and will continue to engage in said unlawful acts and practices unless enjoined by this Court.

Wherefore petitioner prays:

1. That writs of subpoena issue directed to each of said defendants, commanding them to appear herein and answer the allegations contained in this petition, and to abide by and perform such decrees as the Court may make in the premises;

2. That the monopoly, combination and conspiracy described herein be declared illegal and in violation of the Sherman Antitrust Act;

3. That defendants and each of them, and each and all [fol. 14] of their respective officers, agents and employees, and all persons acting or claiming to act on behalf of them, or any of them, be perpetually enjoined from continuing the unlawful practices hereinabove described and, particularly, from requiring jobbers to procure licenses for handling gasoline treated with ethyl fluid; and from agreeing with refiners, carrying out existing agreements, or otherwise requiring, that the latter shall sell gasoline treated with ethyl fluid to such jobbers only as defendants shall license or otherwise designate; and from in any other way, directly or indirectly, continuing to engage in the aforesaid monopoly, combination and conspiracy, or any other monopoly, combination and conspiracy of like character or effect;

4. That petitioner have such other and further relief as the case may require and the Court may deem proper in the premises;

5. That petitioner recover its costs.

John Henry Lewin, Hammond E. Chaffetz, W. B. Watson Snyder, Grant W. Kelleher, Special Assistants to the Attorney General. Stanley Reed, Acting Attorney General, Feb'y 16, 1937. Robert H. Jackson, Assistant Attorney General. Lamar Hardy, United States Attorney.

[fols. 15-47] *Duly sworn to by John Henry Lewin. Jurat omitted in printing.*

[fol. 48] IN UNITED STATES DISTRICT COURT

[Title omitted]

ANSWER

Now come the defendants, Ethyl Gasoline Corporation, Earle W. Webb (incorrectly designated herein as Earle C. Webb), and John Coard Taylor, and for answer to the Petition herein say:

1. They admit the allegations of paragraph 1 of the Petition.

2. For answer to the allegations of paragraph 2 of the Petition, they admit that the purpose of this suit is for relief under the Act of Congress of July 2, 1890, known as the Sherman Anti-Trust Act, but deny that they or any of them have in any way violated said Act.

3. They deny the allegations of paragraph 3 of the Petition except that they admit that the interstate commerce in gasoline described in the Petition is carried on in part within the Southern District of New York.

4. For answer to the allegations of paragraph 4 of the Petition, they admit that for a number of years the defendant corporation has been continuously engaged in the production of an anti-knock compound (or fluid) known by its licensees as Ethyl fluid when used in making a premium gasoline, and as "Q" fluid when used in making a regular gasoline, and they admit the allegations of said

paragraph 4 with respect to the nature of said fluids. They [fol. 49] admit that defendant corporation is the sole producer of said Ethyl and "Q" fluids within the United States and that it is the owner of exclusive rights under Letters Patent of the United States covering the manufacture, use and sale of said fluids and allege that it is also the owner of exclusive rights under Letters Patent of the United States covering the manufacture, use and sale of motor fuels containing tetraethyl lead and covering the use of tetraethyl lead as an anti-knock in an internal combustion engine. Defendants are without information sufficient to constitute a belief as to whether or not other substances of like character are manufactured or sold and therefore defendants deny that no other substance of like character is manufactured or sold but they admit that no other substance of like character is sold in commercial volume. Defendants admit that speaking generally Ethyl and "Q" fluids have been found to be the cheapest way of getting certain high anti-knock values, but they deny the allegations of paragraph 4 of said Petition with respect to the practicability of improved refining processes, such as so-called "cracking" processes, and allege that there are many instances where by reason of the quality of the crude petroleum to be refined and the nature of the distribution of petroleum products by a refiner, "cracking", re-forming, and other refining processes have been and are now being employed to produce a high octane rating gasoline competitive with the addition of Ethyl and "Q" fluids to gasoline, and they further allege that a very substantial amount of gasoline to which no Ethyl or "Q" fluids have been added is sold in the United States in competition with gasoline to which Ethyl and "Q" fluids have been added, and that the gasoline so sold is produced by either cracking, reforming, or other refining processes, or by the addition of other compounds.

5. As to paragraph 5 of the Petition, defendants admit the allegations of said paragraph as to the defendants Earle W. Webb and John Coard Taylor, and admit that the defendant corporation does not manufacture, refine or sell any gasoline, and that only in exceptional circumstances does it mix Ethyl or "Q" fluids with gasoline, but upon [fol. 50] information and belief defendants deny each and every other allegation of said paragraph.

6. For answer to the allegations of paragraph 6 of the Petition, they admit that more than 85% of all gasoline sold in the United States which is processed so as to obtain a high octane rating is treated with Ethyl and "Q" fluids, and that approximately 70% of all gasoline manufactured and sold in the United States is treated with the same fluids. Defendants are without information sufficient to form a belief as to each and every other allegation of said paragraph 6, and therefore deny the same.

7. They admit the allegations of paragraph 7 of the Petition except they *they* allege that gasoline is also sold by refining companies to independent retail dealers and to consumers.

8. They admit the allegations of paragraph 8 of the Petition except that they deny that a large part of the gasoline sold by jobbers is sold and distributed by such jobbers in interstate commerce, and allege the fact to be that, only a comparatively small number of jobbers sell any gasoline in interstate commerce and that only a comparatively small portion of the sales of gasoline by jobbers is in interstate commerce.

9. They deny each and every allegation of paragraph 9 of the Petition.

10. For answer to the allegations of paragraph 10 of the Petition, they admit that the defendant corporation has entered into numerous aggreements with refiners of gasoline pursuant to which Ethyl and "Q" fluids are delivered by the defendant corporation to said refiners from time to time and said refiners are licensed to manufacture Ethyl gasoline and gasoline containing "Q" Brand of Anti-Knock Compound, and to sell and deliver same, and that said license agreements purport to authorize said refiners to treat gasoline manufactured by them with at least sufficient Ethyl fluid (not exceeding 3 cubic centimeters of tetraethyl lead per gallon of gasoline) to make the gasoline equal in anti-knock value to the standard Ethyl gasoline as fixed by the [fol. 51] defendant corporation, which standard now constitutes an octane rating of not less than 76 (the gasoline so treated being known as Ethyl gasoline), or with an amount of "Q" fluid to make the resultant product manufactured under the agreement have at the time of sale to the con-

sumer an anti-knock value of not more than seventy (70) octane number (such gasoline being known as regular gasoline and sometimes referred to by defendants, refiners and jobbers as "Q" gasoline). The defendants admit that the said license agreements impose restrictions upon the refiner licensees with respect to the comparative price at which Ethyl gasoline may be sold by them to jobbers, dealers and consumers, and the restriction that said "Q"-treated gasoline shall be sold by the refiner as the next highest priced motor fuel below refiner's Ethyl gasoline and shall be the refiner's best non-premium gasoline referred to in the agreement between refiner and defendant corporation in respect to the manufacture and sale of Ethyl gasoline. However, defendants allege that the agreements which the defendant corporation has entered into with refiners as aforesaid with respect to price at which the resultant product may be sold are license agreements of the general character annexed to the Petition as Exhibits A, B and C and that the authority and restriction of such license agreements are as therein expressed, and the defendants allege that all deliveries of Ethyl and "Q" fluids to refiners are subsequent to the making of such a license agreement and in conformity with the provisions thereof. Defendants deny each and every other allegation of said paragraph 10 of the Petition.

11. For answer to the allegations of paragraph 11 of the Petition, defendants aver that there is an average of approximately 0.85 cubic centimeters of tetraethyl lead in "Q" fluid (not fluid itself) per gallon of gasoline treated to produce regular or "Q"-treated gasoline, and that there is an average of approximately 2.25 cubic centimeters of tetraethyl lead in Ethyl fluid (not fluid itself) per gallon of gasoline treated to produce premium or Ethyl gasoline, and that approximately 94% of the gasoline treated with tetraethyl lead is regular or "Q"-treated gasoline; and [fol. 52] except as herein expressly admitted or averred, defendants deny each and every allegation of said paragraph 11.

12. They admit the allegations of paragraph 12 of the Petition, except that they deny upon information and belief, that all but one of said major company licensees treat with Ethyl fluid their regular or so-called house brands of gasoline, and that such gasoline constitutes more than 90% of

all gasoline manufactured and sold by each of said major company licensees; and they allege that the fluid so used is "Q" fluid and that such gasoline constitutes between 80% and 90% of all gasoline manufactured and sold by each of said major company licensees.

13. They deny each and every allegation of paragraph 13 except that they admit that each of said refiner license agreements contains the provision as to sales to jobbers, that the refiner licensee will sell gasoline when treated with Ethyl or "Q" fluids to only those jobbers who hold a license from the defendant corporation to sell such gasoline, and they admit the making of jobber agreements in the form of Exhibits D and E attached to the Petition. Defendants further admit that jobbers desiring to apply for such licenses are generally required to apply through their prospective refiner suppliers who in turn submit such jobber applications to defendant corporation, and that often the same jobbers have been licensed under both forms of license. Defendants further admit that approximately ten thousand (10,000) jobbers have been granted such licenses by the defendant corporation and that numerous applications for jobber licenses have been denied. Defendants aver that the principal business relation of the defendant corporation with jobbers is in the promotion of sales of Ethyl and "Q"-treated gasoline and the protection of the quality thereof and the good will of the defendant corporation therein, and the maintenance of health regulations hereinafter mentioned.

14. For answer to the allegations of paragraph 14 of the Petition, they admit that said jobber licenses are aimed at [fol. 53] the protection of health and the maintenance of quality of gasoline treated with Ethyl and "Q" fluids, and that to the knowledge of these defendants, no authentic cases of lead poisoning or other injury to health from such lead treated gasoline have ever been discovered, and that no minimum octane number is required by defendants in respect to regular gasoline containing "Q" fluid, and they allege that the United States Public Health Service has prescribed certain regulations covering the blending of Ethyl and "Q" fluids with gasoline and the sale and use of gasoline treated with such fluids and that the defendant corporation has endeavored by its jobber licenses to comply with such regulations and takes steps to see that its jobber

licensees observe such regulations and that in so doing defendants are conforming to the wishes of the United States Public Health Service and that such performance on the part of the defendants is essential to the maintenance of the good will of the defendant corporation with the United States Public Health Service, with the licensees of defendant corporation, and with the public. Defendants admit that in the opinion of executives of the defendant corporation, the addition of Ethyl fluid or "Q" fluid to gasoline does not cause or produce any dangers or hazards to health and is no more dangerous to health than ordinary untreated gasoline provided that said gasoline is used for the purpose for which it is designed to be used, namely, as a motor fuel only, and that it does not contain an amount of tetraethyl lead which is in excess of that prescribed by the regulations of the United States Public Health Service, and the aforesaid licenses. Defendants allege that the anti-knock compound intended for use in the production of said regular gasoline referred to in paragraph 14 of the Petition is delivered by the defendant corporation to refiners as "Q" fluid and as such is well known in the oil business, and that gasoline produced by the addition of "Q" fluid is sold by refiners to their jobbers and other customers and upon information and belief is known and referred to by a large number of refiners, jobbers and retailers as "Q" gasoline. Defendants allege that in the sale of said regular or "Q" treated gasoline the defendant corporation has required the [fol. 54] jobber to specify the trade name said jobber will use in connection with the sale of "Q" treated gasoline as appears from paragraph 4 of the form of jobber license agreement attached to the Petition as Exhibit E. Defendants further allege that by reason of said regulations of the United States Public Health Service said regular or "Q" treated gasoline is required to be dispensed at pumps bearing lead warning signs of the prescribed form substantially as set forth in Exhibit E of said Petition; that upon information and belief said warning signs have acquired a meaning with a large number of the public purchasing motor fuels as indicating a grade of gasoline of good quality and such "Q" treated gasoline is understood in the mind of a substantial percentage of the purchasing public to be related to Ethyl Gasoline and to be sponsored by the defendant corporation. Defendants allege that substantially all of such "Q" treated gasoline is between 68 and

70 octane and that the defendant corporation has specified in its refiner's license contracts for the production of so-called "Q" gasoline certain requirements as to the distillation, sulphur, corrosion and gum qualities of said gasoline as more fully appears in paragraph 5 of Exhibit A attached to said Petition, and that the jobber license contracts such as Exhibit E of the Petition provide that jobbers shall not adulterate or modify "Q" treated gasoline as sold by the refiner; all for the purpose of maintaining the reputation and good will of the defendant corporation. Except as herein expressly admitted, defendants deny each and every allegation in said paragraph 14 of the Petition.

15. Defendants deny each and every allegation of paragraph 15 of the Petition except that they admit they have refused to grant licenses to a number of jobbers who were not abiding by the marketing policies of the major oil companies or the market leaders among such major oil companies or who were not maintaining the retail prices for gasoline posted by said major oil companies or market leaders. Defendants are informed and believe that if there are or have been any instances of threats or apparent threats as described in paragraph 15 of the Petition, they [fol. 55] are isolated instances and unauthorized by defendants. They allege on information and belief that there are innumerable instances where jobber licensees have not followed the marketing policies of the major oil companies or the market leaders among such major oil companies and innumerable instances of jobber licensees who do not maintain and have not maintained the retail prices for gasoline posted by said major oil companies or market leaders, concerning which instances no action of any character has ever been taken by the defendants. Defendants admit that each jobber license contains a provision whereby defendant corporation is authorized to cancel said license without stating any reasons therefor at any time upon thirty (30) days' notice, but they are informed and believe and therefore allege that such cancellation clause has not been exercised because a jobber licensee was not following the policies and prices of the major oil companies or market leaders.

16. They deny each and every allegation of paragraph 16 of said Petition except that they admit that the defendant corporation has a number of field representatives whose primary function is to promote the sale of gasoline treated

with Ethyl and "Q" fluids and also to see to it that health regulations are being observed and to protect and promote the good will of defendant corporation, and that said field representatives do investigate and report to the defendant corporation many conditions in respect to the marketing of gasoline, including information sometimes as to the marketing practices and prices observed by jobbers in their retail outlets and by the retail dealers to whom they sell, and defendants allege that said field representatives, as a part of said investigations and reports, obtain samples of gasoline treated with Ethyl and "Q" fluids for the purpose of its being analyzed as to quality and as to its compliance with the regulations of the United States Public Health Service and the license agreements aforesaid. Defendants admit that in some instances no records have been made of preserved disclosing the reason why licenses to jobbers have been refused, and defendants admit that said field representatives are located throughout the United States, and that the report and recommendation of the field representative determines largely whether a license will be granted, [fol. 56] and that the recommendations of the field representatives as to whether a license should be granted are generally followed.

17. Upon information and belief, they deny each and every allegation of paragraph 17 of the Petition.

18. They deny each and every allegation of paragraph 18 of the Petition except that they admit that the defendant corporation has from time to time required that each jobber licensee contract to purchase all his requirements of Ethyl Gasoline from one refiner supplier, and it has required in a number of instances a jobber licensee to purchase all his requirements of "Q" treated gasoline from a single refiner supplier. They also admit that the defendant corporation has in some cases refused a license to a jobber who desired to change his source of supply upon the ground that said jobber was under contract to purchase his Ethyl or "Q"—treated gasolines from an existing refiner supplier, which request, if granted, would in the opinion of the defendant corporation have breached the contract which the jobber licensee had with his existing source of supply, although in a very few cases a jobber has contended that such contract had already been abrogated or for other reasons was not enforceable against him.

19. They deny each and every allegation of paragraph 19 of the Petition.

20. They deny each and every allegation of paragraph 20 of the Petition.

21. Defendants further allege that the defendant corporation is the owner of valuable trade-mark rights covering the manufacture and distribution of Ethyl and "Q" antiknock compounds (herein referred to as Ethyl and "Q" fluids) and covering the sale of Ethyl gasoline and gasolines containing "Q" fluid and tetraethyl lead; that defendant corporation has expended a large sum of money and labor in developing and promoting the said trade-mark rights, the good will, reputation and business of the [fols. 57-60] defendant corporation; and that the licensing policies of defendant corporation are reasonable and necessary for the protection of said trade-mark rights, the good will, reputation and business of the defendant corporation.

22. Defendants therefore deny that Petitioner is entitled to the relief prayed for in the Petition or to any part thereof, or to any relief whatsoever against these defendants or any of them, and defendants aver that Petitioner is without equity in the premises, and defendants therefore pray that the Petition be dismissed.

Note.—Defendants have heretofore transmitted to Petitioner a request for further particulars of Petitioner's said Petition, and this answer is filed pursuant to an understanding and agreement with Petitioner that it may be filed without prejudice to defendants' right to move hereafter for further particulars in accordance with such request.

Ethyl Gasoline Corporation, Earle W. Webb and John Coard Taylor; by (signed) Cooper, Kerr & Dunham, Their Solicitors.

(Signed) Drury W. Cooper. Harold W. Norman. Robert S. Dunham, of Counsel.

Duly sworn to by Earle W. Webb and John C. Taylor. Jurats omitted in printing.

[fol. 61] IN UNITED STATES DISTRICT COURT

[Title omitted]

STIPULATION OF FACTS

Plaintiff having filed its petition herein and defendants having filed their answer, it is hereby stipulated and agreed that the issues raised by said pleadings shall be determined without the introduction of other evidence on the basis of the following statement of facts, agreed to solely for the purposes of this suit, subject to objections by either side on the ground of relevancy or materiality, the right to interpose such objections being expressly reserved:

1. Defendant Ethyl Gasoline Corporation is a corporation organized in 1924 under the laws of *of* the State of Delaware, and has a principal place of business at 135 East 42nd Street, in the City and State of New York. One-half of its capital stock is owned by the Standard Oil Com-[fol. 62] pany (New Jersey), and the remainder is owned by General Motors Corporation and E. I. du Pont de Nemours Company. Defendants Earle W. Webb and John Coard Taylor are President and Vice-President in charge of sales, respectively, of Ethyl Gasoline Corporation. Defendant Webb is a citizen of the State of Connecticut and resides in the town of Greenwich in that State. Defendant Taylor is a citizen of the State of New Jersey and resides in the town of Montclair in that State.

2. Defendant corporation has been for a number of years continuously engaged in the production and sale of an anti-knock compound or fluid (hereinafter referred to as "fluid"), consisting principally of tetraethyl lead, used in increasing the octane, or anti-knock, rating of motor fuel, principally gasoline. When a mixture of gasoline and air is burned in an automobile engine of relatively high compression, "knocking" occurs at frequent intervals. This "knocking" is reduced or eliminated if the mixture of gasoline and air is burned in the presence of the vapors of this fluid. Commercially this result has been obtained by mixing with gasoline, at the refineries, relatively minute quantities of fluid so that the fluid will be in the combustion chamber of the automobile engine when the gasoline is burned. Automobile engines of recent years have generally been of relatively high compression.

The compression of an automobile engine is the extent to which the mixture of gasoline vapor and air is compressed in the cylinder by the piston moving upward. The higher the compression of an automobile engine the greater is its inherent efficiency, i. e., it will develop more power and run [fol. 63] longer with a given quantity of gasoline, hence it may be smaller in size and still suitable for a certain task. However, in order to realize these advantages the gasoline used must be of a correspondingly high compression value (high "critical compression pressure", i. e., high anti-knock value); otherwise, "knocking" with a loss of power, instead of an increase, will occur whenever, as is frequent in normal driving, the automobile engine is called upon to do more than a small amount of work. Generally stated, the octane number of gasoline is a rating, on a convenient arbitrary scale, of its critical compression pressure—that is, the compression to which a mixture of the gasoline and air may be subjected without causing a "knock" and consequent loss of power in an automobile engine. Engines of high compression may be made, by retarding of the spark, to operate without knock on fuels of lower critical compression pressure than those of higher octane rating, but this results in a reduction in both power and economy, thus defeating the purpose for which the high compression feature of the engine was designed.

The present composition of fluid, for use in automobile gasolines, is as follows, in percentages by weight:

Tetraethyl lead	63.3
Ethylene dibromide	25.75
Ethylene dichloride	8.72
Kerosene, dye, etc.	2.23

3. Defendant corporation is the sole producer of fluid in the United States, and is the owner of Letters Patent of the United States: No. 1,573,846, issued February 23, [fol. 64] 1926; No. 1,592,954, issued July 20, 1926; No. 1,668,022, issued May 1, 1928 and No. 1,787,419, issued December 30, 1930, copies of which are attached hereto as Exhibits 3-A, 3-B, 3-C and 3-D respectively.

Patent No. 1,573,846 (Exhibit 3-A) describes and claims an improved motor fuel which is more efficient and higher in anti-knock value than the gasoline from which it is made. The patent claims a product comprising gasoline and an anti-knock ingredient, e. g., tetraethyl lead; and

gasoline treated with fluid (both Ethyl and "regular"), as described in this stipulation, is a product which is claimed in each of the claims of the patent. Patent No. 1,592,954 (Exhibit 3-B) describes and claims compositions of matter relating to motor fuels, whereby a halide compound, such as a chloride or a bromide, or a compound of like properties, is included with a lead anti-knock ingredient so that when the fuel is burned, the lead will form only a non-fluxing compound and deleterious effects of lead on spark plug points and other motor parts, possible over a period of time, will be avoided. As described in this stipulation, fluid is a product which is claimed in claims 9 and 10 of this patent, and gasoline treated with fluid (both Ethyl and "regular") is a product which is claimed in claims 1 to 7, inclusive. Patent No. 1,668,022 (Exhibit 3-C) describes and claims compositions of matter relating to motor fuels, wherein one feature involves the use of volatile bromide compounds such as ethylene dibromide, as specifically advantageous substances for preventing the formation of fluxing compounds and consequent deleterious effects on motor parts, when a lead anti-knock ingredient is used. As described in this stipulation, fluid is a product which is claimed [fol. 65] in claims 21, 22 and 23 of this patent, and gasoline treated with fluid (both Ethyl and "regular") is a product which is claimed in claims 9, 10, 11 and 12. Patent No. 1,787,419 (Exhibit 3-D) describes and claims an improved method for using motor fuels, such as gasoline, whereby improved efficiency and an inhibition of knocking are obtained; and whereby low compression gasoline may be used in motors of relatively high compression pressure. The claims of this patent claim the burning, in a motor of relatively high compression, of the combustible mixture of gasoline and air (e. g., the mixture produced in the carburetor of a motor) in the presence of vapors of an anti-knock ingredient, e. g., tetraethyl lead. The present commercial method of introducing tetraethyl lead into the combustion chamber of the motor is by mixing it with gasoline at the refinery so that when the mixture of gasoline and air enters the combustion chamber the vapors from tetraethyl lead are present at the same time. This result was at one time accomplished by mixing fluid with gasoline at the filling station pumps; direct injection of fluid into the intake manifold of the engine has been used to a limited extent by one of the airways.

4. No other substance of like character is manufactured or sold commercially. To explain the position of fluid in the petroleum industry it is necessary to describe briefly the manufacture of gasoline. Speaking generally, gasoline is produced by all or some of the following processes:— (1) The crude oil is distilled, and the distillate boiling within the range of gasoline is separated from the higher and lower boiling constituents. Such gasoline is known as "straight [fol. 66] run" or "virgin" gasoline or naphtha. (2) All or some portions of the products of higher boiling range than gasoline are subjected to high temperatures and (usually) high pressures, and under these conditions are partially converted into products boiling in the gasoline range. This process, which may be carried out under widely varying conditions, is known as "cracking," and the gasoline so produced is known as "cracked gasoline." In the United States at present the amounts of straight run and cracked gasoline produced are about equal. (3) Gasoline is produced by compressing natural gas (thus condensing out some of the gasoline vapors usually contained therein) or by scrubbing natural gas with oil, (thus absorbing some of the gasoline vapors). Gasoline produced by such processes is known as "natural gasoline" or "absorption gasoline," and is generally a very volatile product. (4) Straight run gasoline or naphtha may be modified in chemical composition by subjecting it to heat and pressure under conditions similar to those of cracking. Such a process is known as "reforming," and the product is called "reformed gasoline." (5) Gases formed in the refining processes and natural gas may be subjected to treatment which results in chemical reactions which form gasoline from these gases. Such a process is known as polymerization and the product is known as "polymerized gasoline."

Each of these five types of gasoline has its own chemical and physical properties, and the refiner usually blends them or some of them into one or more commercial grades, depending upon his own marketing set up. Straight run gasoline has an anti-knock value which depends on the nature of the crude oil from which it was made. This may be [fol. 67] quite high in the case of a limited number of crude oils (70 octane number or better) and as low as 30 octane number in a limited number of other cases, but the range of anti-knock values of straight run gasolines distilled from the greater part of crude oil produced in the United States

is from forty to sixty octane number. The anti-knock value of cracked gasoline depends both upon the nature of the crude oil and the nature of the cracking process, but mainly on the latter. It is usually higher than that of the straight run gasoline from the same crude and may range as high as 70 octane number and sometimes as high as 72 or 73 octane number, but usually does not exceed 68 or 69 octane number. The anti-knock value of reformed gasoline is always higher than that of the straight run gasoline and may be made very high. However, it is usually true that the higher the anti-knock value obtained, the greater the losses in the form of gas and coke. Natural or absorption gasoline (the quantity of which is limited by the amount of natural gas available) varies in anti-knock value with the source, and being extremely volatile, is used for blending with other gasolines to give them increased volatility. Polymerized gasoline is usually of very high anti-knock value (80 octane number or better), but the amount which any refinery can produce is limited to the amount of refinery or natural gases available.

Each of the improved refining processes described above is patented, and there are several distinct groups of patents covering each or all of such processes, under which licenses are offered by their respective owners. Many refiners have paid-up licenses under one or more of these groups of [fol. 68] patents, and current royalty fees are not a controlling factor with refiners in deciding whether to improve the anti-knock value of their gasoline by the addition of "fluid" or by the use of patented refining processes. All or nearly all refiners do some cracking. In practice there is wide variation in the procedure which different refiners select for producing gasoline of high anti-knock value. Some companies find it most economical to do as little as possible of cracking and reforming, thus producing at first a gasoline of low anti-knock value, and to add thereto a relatively large amount of fluid. Other refiners find it more economical to do more cracking, reforming, and polymerizing, and to add little or no fluid to the gasoline. The same refiner may in one refinery add the maximum amount of fluid, and in another refinery add no fluid at all, depending upon the particular circumstances at the two refineries. All major oil companies except Sun Oil Company, American Oil Company and the Shell Companies use some fluid in substantially all their regular and premium gasoline, and

The Shell Companies use fluid in their premium and in a part of their regular gasoline. Sun Oil Company, a large refiner, has never applied for a license to use fluid, and the Shell Companies, constituting one of the largest refiners, although licensed by defendant corporation to do so, do not use fluid in most of their regular gasoline. The regular gasoline from these two companies is sold competitively with regular gasoline treated with fluid. Sun Oil Company does not generally do business through jobbers. American Oil Company does business only along the East Coast of the United States.

High anti-knock values may be and are also obtained by [fol. 69] the addition to gasoline of benzol and alcohol, but insufficient quantities of the former are available to permit its use in any large amounts of gasoline (the percentage of gasoline so treated being about 2%), while alcohol has not been used commercially in the United States to any significant extent, though it has been used extensively abroad for many years. The American Oil Company, a large refiner, has a license for the use of fluid, but by preference sells a benzol treated gasoline at a price higher than that charged in the same territory for gasoline treated with fluid.

Speaking generally, most refiners find it economical and advantageous to obtain a part of the anti-knock value of their regular and premium gasoline by the use of fluid.

5. Approximately 70% of all gasoline manufactured and sold in the United States is treated with fluid. Nearly all of the gasoline manufactured and sold in the United States contains some cracked or reformed gasoline but approximately 20% of the total gasoline sold in the United States is not processed so as to obtain a high octane rating. A substantial amount of this 20% of low octane gasoline is sold as so-called third grade gasoline. Approximately 85% of all gasoline sold in the United States which has been processed so as to obtain a high octane rating is treated with fluid.

6. Defendants do not manufacture, refine or sell any gasoline, and only in exceptional circumstances does defendant corporation itself mix fluid with gasoline of others. Defendant corporation manufactures the fluid and sells the same to licensed refiners, to be mixed by the latter with their [fol. 70] gasoline, intending that the treated gasoline shall be used as a motor fuel. Defendant corporation does not sell fluid commercially to any persons other than licensed

refiners. Defendant corporation makes its profit solely from the sale of fluid and its annual profits have been and are very substantial. Fluid is delivered by defendants in interstate commerce to the refineries and some terminal points in specially built tank cars, tank trucks and drums. The process of treating gasoline with fluid is purely a mixing process at the receiving points, in which the fluid is added to gasoline by means of carefully designed equipment which accomplishes the unloading and mixing operation through a closed system entirely by vacuum for the purpose of decreasing or eliminating possible health hazards due to spillage of tetraethyl lead in concentrated form. The building and machinery constituting the plant by which the fluid is unloaded, handled and mixed by the refiners with gasoline are required by defendant corporation to be built in strict compliance with blueprints submitted to and approved by defendant corporation. A typical plant is illustrated by Exhibits 6-A and 6-B attached hereto. The average cost of such a plant and equipment is around $10,000. Defendant corporation further requires that the process of handling and mixing fluid be carried out in ac-ordance with its printed regulations, a copy of which is attached hereto as Exhibit 6-C.

7. Gasoline is manufactured from crude petroleum at refineries located in various States of the United States, principally in the States of Texas, Oklahoma, California, [fol. 71] Illinois, Indiana, Missouri, New Jersey, Pennsylvania, New York, Kansas, Wyoming, Michigan, Louisiana, Ohio, Kentucky, Montana, and West Virginia. The greater part of all gasoline manufactured at such refineries, and the greater part of all gasoline treated with fluid, is sold and transported in interstate commerce from the States in which such refineries are located into each of the other States of the United States, including the State of New York and the Southern District of New York, wherein such gasoline is sold for consumption. Said gasoline is sold in part through wholesale and retail outlets owned and controlled by refining companies; in part to independent retail dealers and consumers; and in part to so-called jobbers for resale to retail dealers and consumers.

8. Jobbers usually own or lease and operate bulk storage plants conveniently located so as to serve gasoline purchased by them from refiners, by their (jobbers') tank trucks or tank wagons, to retail service stations, either

owned or operated by them, or independently owned or operated by retail dealers, in the various marketing territories served by them. There are approximately 12,000 jobbers of gasoline doing business in the several States of the United States, and they distribute a substantial part of all gasoline sold and distributed in the United States. The greater part of all gasoline, and of the gasoline treated with fluid, purchased by said jobbers is purchased by them in tank car quantities, and is delivered to them from the States in which said gasoline is refined to the States in which said jobbers are engaged in business. A small part of the gasoline sold by jobbers is sold and distributed by them in inter-[fol. 72] state commerce from the States in which their bulk storage plants are located to service stations located in adjoining States.

9. Defendant corporation, acting with and through defendants Webb and Taylor and others of its officers and employees, has entered into numerous agreements with refiners of gasoline, copies of typical forms of which are attached hereto as Exhibits 9-A, 9-B and 9-C, pursuant to which fluid is sold and delivered by defendant corporation to said refiners from time to time, and pursuant to which said refiners are licensed to mix said fluid with gasoline and to sell gasoline containing the same, as follows: Said license agreements purport to authorize said refiners to treat gasoline manufactured by them with sufficient fluid (not exceeding 3 cubic centimeters of tetraethyl lead per gallon of gasoline) to make the gasoline equal in anti-knock value to the standard of Ethyl gasoline as fixed by the defendant corporation, which standard now consists of an octane rating of not less than 76 (the gasoline so treated being known as Ethyl gasoline), or with an amount of fluid to make the resultant product have at the time of sale to the consumer an anti-knock value of not more than seventy (70) octane number (such gasoline being known as regular gasoline and sometimes referred to as "Q" gasoline). The licensing with regard to regular gasoline was inaugurated in the spring of 1933. Reference in this stipulation to gasoline of high octane or anti-knock value shall be deemed to refer to gasoline having an octane rating of 68 or more. Regular gasoline, as referred to in this stipulation (whether treated with [fol. 73] fluid or not), almost universally is of high octane or anti-knock value.

10. An average of approximately 0.9 cubic centimeters of tetraethyl lead per gallon, or one part of tetraethyl lead to 4200 parts of gasoline, is used to produce regular gasoline. The average quantity of tetraethyl lead used to produce Ethyl gasoline is approximately 2.25 cubic centimeters per gallon of gasoline, or one part of tetraethyl lead to 1700 parts of gasoline. Approximately 94% of all gasoline treated with fluid is regular gasoline.

11. Defendants have issued licenses to approximately 123 refiners, who together refine and sell approximately 88% of all gasoline sold in the United States. All except one (Sun Oil Company) of the major (i. e., large, integrated) refiners of gasoline in the United States have entered into such license agreements with defendant corporation, and all except two (Shell Companies and American Oil Company) of said major company licensees treat with fluid substantially all of their regular or so-called house brands of gasoline. Gasoline treated with fluid constitutes between 75% and 80% of all gasoline manufactured and sold by said major company licensees (except Shell and American) and between 70% and 72% of all gasoline manufactured and sold by other than major company licensees. Most of said major company licensees sell some quantities of regular gasoline which contains no fluid, principally to special commercial accounts.

12. Each of said refiners' license agreements purports to [fol. 74] impose a restriction upon the refiner licensee with respect to the minimum differential at which Ethyl gasoline may be sold by it to jobbers, dealers and consumers above the price of the licensee's best non-premium grade of gasoline, and a restriction that regular gasoline treated with fluid shall be sold by the refiner as the next highest priced motor fuel below refiner's Ethyl gasoline and shall be the refiner's best non-premium gasoline referred to in the agreement between refiner and defendant corporation in respect to the manufacture and sale of Ethyl gasoline. All deliveries of fluid to refiners are made subsequent to the making of such license agreements and in conformity with the provisions thereof.

13. Each of said refiner license agreements contains the provision (almost invariably complied with by refiner licensees) with respect to sales to jobbers purporting to restrict the refiner licensee to selling gasoline when treated with fluid to those jobbers only who hold licenses from the

defendant corporation to distribute such gasoline. Jobbers have been licensed by defendant corporation under two forms of licenses, one purporting to license the handling of Ethyl gasoline and the other of regular gasoline containing fluid, copies of each of said forms of jobber licenses being attached hereto as Exhibits 13-A and 13-B respectively. Jobbers desiring to apply for such licenses are generally required by defendant corporation to apply through their prospective refiner-suppliers who in turn submit such jobber applications to defendant corporation. In many cases the same jobbers have been licensed under both forms of jobber-license. Approximately eleven thousand (11,000) of the [fol. 75] twelve thousand (12,000) jobbers aforementioned have been granted such licenses by the defendant corporation and numerous applications for jobber licenses have been denied. Complaints have been received by the Department of Justice, from time to time during the last several years, from jobbers whose applications for jobber licenses have been denied. Many licenses were granted to licensees to whom licenses were at first denied. Apart from the issuance of licenses to jobbers, the only business relations of the defendant corporation with jobbers are in the promotion of sales by the jobbers of gasoline treated with fluid and in connection with the investigation of the jobbers.

14. Gasoline containing fluid was first placed on sale February 1, 1923, and about 300,000,000 gallons of such gasoline had been sold up to May, 1925. During this period several serious cases of lead poisoning occurred in the manufacture of tetraethyl lead and concentrated fluid. Certain of these cases achieved wide newspaper publicity in which no distinction was made between the manufacturing hazard and the possibility of a public health hazard which might exist in the use of treated gasoline. In July, 1924, a committee was appointed by the President of General Motors Company consisting of representatives of General Motors Company, Standard Oil Company (New Jersey) and E. I. Dupont de Nemours Company to investigate the public health problems involved in the manufacture, sale and distribution of tetraethyl lead and Ethyl gasoline. This committee requested the United States Bureau of Mines and Columbia University, as impartial parties, to conduct experimentation on this subject. Although the [fol. 76] Bureau of Mines was of the opinion that the United States Public Health Service was the proper gov-

ernmental body to conduct the experimentation, after consultation with the United States Public Health Service, the Bureau of Mines agreed to comply with the request of the committee, in view of the fact that the Public Health Service had no funds available for that purpose. Defendant corporation had established a medical department in its own organization, through which it had undertaken an intensive study of the public health problems involved in the manufacture, sale and use of its product.

Late in 1924 while all the above experiments were being conducted, the Surgeon General was requested by individuals interested in the matter but not connected with defendants to call a conference to determine whether or not there was a public health question involved in the manufacture, distribution or use of gasoline containing tetraethyl lead. Upon completion of a preliminary report of the Bureau of Mines and after conferring with the staff of that Bureau conducting the experiments and the medical committee at Columbia University studying the problem, the Surgeon General called a conference on May 20, 1925, of state and municipal health officials, representatives of labor, authorities on industrial health and hygiene, physiologists and physicians, as well as representatives of the defendant corporation, General Motors Company, Standard Oil Company (New Jersey), and E. I. Dupont de Nemours Company, and defendant Webb. Defendant corporation voluntarily on May 5, 1925, discontinued the sale of the fluid pending the outcome of the conference, and did not resume said business until June, 1926. The results of the studies [fol. 77] of the Bureau of Mines and Columbia University as well as the independent observations and opinions of medical and public health authorities were before the conference. The following resolution was adopted by the conference:

"It is the sense of this conference that the Surgeon General of the United States Public Health Service appoint a committee of seven recognized authorities in clinical medicine, physiology, and industrial hygiene, to present to him, if possible, by January 1 next, a statement as to the health hazard involved in the retail distribution and general use of tetraethyl lead gasoline motor fluid; and that this conference indorses as wise the decision of the Ethyl Gasoline Corporation to discontinue temporarily the sale of ethyl gas;

that this investigation shall be paid for exclusively out of public funds; and that the results of this investigation shall be reported back to a public conference called for the purpose by the United States Public Health Service, at which labor shall be represented."

The Surgeon General thereupon appointed a committee consisting of Dr. David L. Edsall, Dean of Harvard Medical School, Dr. William H. Howell, professor of Physiology at John Hopkins Medical School, Dr. Reid Hunt, professor of Pharmacology at Harvard Medical School, Dr. Walter S. Leathers, professor of Preventive Medicine at Vanderbilt University, Dr. Julius Stieglitz, professor of Chemistry at the University of Chicago, and Charles E. Winslow, professor of Public Health at Yale University.

Prior to the investigation by the Committee appointed by the Surgeon General, no more than 3 cubic centimeters of [fol. 78] tetraethyl lead per gallon of gasoline had been used, due to the fact that licensees would not have found it profitable to use a greater concentration.

On January 17, 1926 the aforesaid committee reported to the Surgeon General in part as follows:

"On the basis of this investigation, the committee feels that the following general conclusions are justified:

1. Drivers of cars using ethyl gasoline as a fuel and in which the concentration of tetraethyl lead was not greater than 1 part to 1,300 parts by volume of gasoline showed no definite signs of lead absorption after exposures approximating two years.

2. Employees of garages engaged in the handling and repairing of automobiles and employees of automobile service stations may show evidence of lead absorption and storage, as indicated by the lead content of the feces and the appearance of stippled cells in the blood. In garages and stations in which ethyl gasoline was used the amount of apparent absorption and storage was somewhat increased, but the effect was slight in comparison with that shown by workers in other industries where there was a severe lead hazard (Group E) and for the periods of exposures studied was not sufficient to produce detectable symptoms of lead poisoning.

3. In the regions in which ethyl gasoline has been used to the greatest extent as a motor fuel for a period of between two and three years no definite cases have been discovered of recognizable lead poisoning or other disease resulting from the use of ethyl gasoline.

In view of these conclusions your committee begs to report that in their opinion there are at present no good [fol. 79] grounds for prohibiting the use of ethyl gasoline of the composition specified (i. e., not exceeding 3 cubic centimeters of tetraethyl lead per gallon of gasoline) as a motor fuel, provided that its distribution and use are controlled by proper regulations. The committee feels that the formulation of specific regulations in regard to the manufacture, distribution and use of tetraethyl lead, ethyl fluid, and ethyl gasoline for adoption and enforcement by the several States belongs properly to the office of the Surgeon General of the Public Health Service. In an appendix to this report, attention is called to certain suggestions which have been made in the course of the discussions of this committee and which it is believed should be taken into consideration in making such regulations.

In conclusion we beg to say that we are conscious of the fact that the conclusions to which we have come in this report, although based upon most careful and conscientious investigations, are subject to the criticism that they have been derived from the study of a relatively small number of individuals who were exposed to the effects of ethyl gasoline for a period of time comparatively brief when we consider the possibilities in connection with lead poisoning. A more extensive study was not possible on account of the limited time. It remains possible that, if the use of leaded gasolines becomes widespread, conditions may arise very different from those studied by us which would render its use more of a hazard than would appear to be the case from this investigation. Longer experience may show that even such slight storage of lead as was observed in these studies may lead eventually in susceptible individuals to recognizable lead poisoning or to chronic degenerative diseases of a less obvious character. In view of such possibilities the [fol. 80] committee feels that the investigation begun under their direction must not be allowed to lapse. The respective States would be dependent upon the findings of such investigations for changes in their regulations. With the experi-

ence obtained and the exact methods now available, it should be possible to follow closely the outcome of a more extended use of this fuel and to determine whether or not it may constitute a menace to the health of the general public after prolonged use or under conditions not now foreseen."

In accordance with the recommendation of the committee, the Surgeon General in 1926 proposed that certain regulations covering the manufacture, shipments and handling of tetraethyl lead and fluid, and the distribution and sale of treated gasoline be adopted and promulgated by the several states and municipalities of the United States; a copy of said regulations is attached hereto as Exhibit 14-A and a copy of certain changes in said regulations, made and published by the Surgeon General November 30, 1928 as appears in said copy, is attached hereto as Exhibit 14-B. No states or municipalities have promulgated these or similar regulations. Defendant corporation, which had cooperated with the Public Health Service during the investigation, assured the Surgeon General that it would abide by, and it has voluntarily abided by, the regulations proposed by the Surgeon General. Accordingly, all of its licenses, both refiner and jobber, have included provisions that the said regulations proposed by the Public Health Service shall be maintained. United State Public Health Service has at all times since the publication of its proposed regulations manifested an [fol. 81] active interest in the compliance by defendant corporation and members of the petroleum industry with such proposed regulations.

In conformity with the aforesaid recommendations of the United States Public Health Service, defendant corporation has provided in its jobber licenses that the jobber licensees shall maintain certain notices on pumps from which is dispensed gasoline containing fluid, to the effect that said gasoline "contains lead (tetraethyl)" and is "for use as a motor fuel only." The type of notice or sign first commonly employed after 1928 is exemplified by the sign Exhibit 14-C, attached hereto. Another form of sign, exemplified by Exhibit 14-D, attached hereto, was proposed at a later time, and this second type of sign was approved by the Surgeon General, who advised defendant corporation that in the opinion of himself and other officers of the Public Health Service, either of the signs would be satisfactory for use under the proposed regulations as modified November 30,

1928, and that he and the other officers saw no objection to the use of these signs interchangeably on pumps selling Ethyl and regular gasoline to the public. No authentic cases of lead poisoning or other injury to health from gasoline containing fluid have ever been discovered which can in any way be attributed to the presence of fluid in such gasoline. In the opinion of the executives of the defendant corporation and of the medical and other experts in the employ of said corporation, formed after fourteen years of experience and exhaustive scientific experiments, tests and studies, the addition of fluid to gasoline in the proportions provided for in refiners' licenses has not to date caused or [fol. 82] produced any dangers or hazards to health and such treated gasoline is no more dangerous to health than ordinary untreated gasoline, when used as a motor fuel.

The proposed regulations of the Surgeon General have not been materially changed or modified, except as otherwise noted herein. The defendant corporation has continued and still continues to maintain its medical department. The chief work of that department includes making field surveys of the effects of lead-treated gasoline on human beings; routine examination of persons who handle leaded gasoline and fluid; and extensive scientific experiments, tests and studies relative to the physiological aspects and effects of lead in gasoline.

In association and cooperation with the medical department, but in addition thereto, defendant corporation also maintains a safety department, which consists of supervising officials and a number of field men who devote their entire time to the safety work of this department. That work includes: supervision of the transportation, unloading and handling of fluid, and supervision of its blending with gasoline; supervision of the cleaning of tanks, including jobbers' storage tanks, which have been used for storing leaded gasoline, both Ethyl and regular; ascertainment and investigation of various possible lead hazards; particularly the investigation of the use of fluid, to prevent the same from being handled or used by unauthorized persons. Prior to the formation of the safety department in August, 1936, its present work was conducted by the entire staff of field representatives of the defendant corporation and by certain members of its medical department.

[fol. 83] Similar investigations carried out in other countries have come to substantially the same conclusions as

those of the United States Public Health Service. Thus the report of the Committee on Ethyl Petrol of the British Ministry of Health in 1930 contained the following conclusions:

"26 (i) The results of our experiments agree with the results of the experiments carried out in the United States of America, whether on behalf of the United States Government Committees or of the Ethyl Gasoline Corporation, and fully confirm the view we expressed in our Interim Report that the findings of the United States Government Committee were justified.

(ii) The widespread use of Ethyl Petrol as a motor fuel for motor vehicles would not, in our opinion, increase the proportion of particulate lead in the atmosphere of our streets to such an extent as to constitute a risk even to the health of that part of the population which is most exposed—namely, police officers on traffic control duty and drivers of motor and other vehicles.

(iii) In a properly ventilated garage there would be no danger to health from the exhausts of motor vehicles, or from the evaporation of Ethyl Petrol owing to spillage. Even in a badly ventilated garage the danger due to spillage would not be serious. We wish, however, again to repeat the warning given in our Interim Report that adequate ventilation of all garages, whether or not Ethyl Petrol is used, is a matter of considerable importance, and that the danger from carbon monoxide in an unventilated garage is very serious.

[fol. 84] (iv) The risk arising from the absorption of lead tetra-ethyl owing to the contact of Ethyl Petrol with the skin is so small as to be negligible.

(v) While the deposits from cylinder heads, etc., of cars using Ethyl Petrol contain a high percentage of lead, the quantity and nature of these deposits are such as to make them of little significance to garage workers, if due regard is had to ordinary cleanliness.

(vi) There is no danger to water supplies from the use of Ethyl Petrol.

In view of the conclusions set out above we are of the opinion that there are no reasons for prohibiting the use of Ethyl Petrol in this country and we do not recommend any legisla-

tive action so long as the terms of the contract between the proprietors of the fuel and the distributors in this country secure the continued observance of certain precautions. These precautions are:

(i) That cans and pumps should be labelled to indicate the presence of lead in the fuel and to warn the user to avoid spillage and not to use the fuel for other purposes than motor fuel.

(ii) That the fuel should be dyed as an additional check against its use otherwise than as a motor fuel.

(iii) That the amount of lead tetra-ethyl in the fuel sold for ordinary commercial purposes should not exceed 1 part in 1,300 parts by volume or about 1 in 650 by weight."

15. No minimum octane requirement is imposed by defendants with respect to regular gasoline containing fluid. [fol. 85] Substantially all such gasoline is between 68 and 70 octane number. The requirements imposed in the refiners' licenses with respect to distillation, sulphur, corrosion and gum qualities (see Exhibit 9-A hereto) are such as would normally be met by any gasoline of good quality. Substantially all Ethyl gasoline is between 76 and 80 octane number, the major part averaging about 78 octane number.

16. Defendant corporation's jobber licenses purport to impose the restriction that gasoline containing fluid should not be diluted or otherwise adulterated. Dilution or adulteration has not in practice been found to occur (so far as defendants have been able to ascertain) to any but a very small extent so far as regular gasoline treated with fluid is concerned. Dilution or adulteration of regular gasoline treated with fluid with untreated gasoline of similar general characteristics is difficult to detect, but dilution with gasoline of distinctly inferior quality or with kerosene may be readily detected. When dilution or adulteration of regular gasoline has been discovered, it has ordinarily been necessary only to report the matter to the refiner whose gasoline was involved, in view of the refiner's interest in maintaining the quality of his product.

A number of instances have been found where jobbers or their retail dealers have been selling treated gasoline, sometimes Ethyl and sometimes regular, through pumps which did not carry lead warning signs, and where there has been

dilution of Ethyl gasoline as sold to the public, substitution of untreated for treated gasoline in pumps bearing lead warning signs, and deterioration of Ethyl gasoline through [fol. 86] long storage in jobbers' or dealers' tanks; and defendant corporation, particularly through its field representatives, has made it a practice to investigate such instances and to endeavor to prevent the occurrence or recurrence of the same on the part of licensed jobbers or their dealers.

17. Since April, 1929 each applicant for a jobber license has been investigated by a field representative of defendant corporation. Numerous field representatives are employed by defendant corporation and are located throughout the United States. Said representatives exercise wide discretion in recommending the granting or refusal of jobber licenses. The recommendation of a field representative determines largely whether a license will be issued. Said field representatives are required to report upon their investigations on certain report forms. Exhibit 17-A is the form which has been employed with immaterial changes from April, 1929 to January, 1935. Exhibit 17-B is the form which has been in use since January, 1935. Said reports are submitted by the field representatives to the respective division managers, and are by the division managers forwarded for final approval to the head office of the company in New York City. Following the customary practice of the company, the field representatives usually have not set forth the reasons why recommendations have been made against the issuance of licenses. To a large extent this was due to the reluctance on the part of defendant corporation to preserve in its records the extent to which maintenance of gasoline prices and marketing policies by jobbers entered into the granting of licenses. Officials of the company charged with [fol. 87] reviewing said jobber reports have almost invariably adopted the recommendation of the field representative when approved by his Division Manager. In 90% to 95% of all cases the approval or disapproval of the Division Manager was indicated only by the word "yes" or the word "no" on the face of the report. Usually and only excepting in some cases where the division manager had independent knowledge of pertinent facts, the action of the division manager in approving the report of the field representative was perfunctory in character. Usually no records other than the reports themselves have been made or pre-

served disclosing the reasons why jobber licenses have been refused. A copy of instructions issued to field representatives in 1931 and of supplemental instructions issued in 1932 is attached hereto as Exhibits 17-C and 17-D respectively. The defendant corporation has not made a practice of giving detailed written instructions to its field representative on any subject, including the conduct of jobber investigations or the considerations to which weight should be given in such investigations. The amount of reliance placed by defendant corporation and its officers and employees on the so-called business ethics of jobbers has normally not been disclosed in their records and communications.

18. From April, 1929 to January, 1935, as appears in Exhibit 17-A, one of the questions appearing on the form of jobber report related to the "business ethics" of the jobber applicant. Said term has been employed by defendants to denote compliance with marketing policies and prevailing prices of the petroleum industry as described in paragraph 21. In January 1935, said question with reference to busi- [fol. 88] ness ethics was eliminated from the form of jobber report, as appears in Exhibit 17-B. But the "business ethics" of the jobber has continued to be among the principal subjects of investigation, the findings of the field representatives with respect thereto being incorporated in the recommendations of the field representatives for or against the issuance of a license, made at the end of the report. An adverse finding upon the business ethics of a prospective jobber licensee is alone in many instances sufficient ground for defendant corporation to refuse such jobber a license. The greatest number of jobber applicants who were denied licenses were turned down on the basis of adverse findings of field representatives as to "business ethics." In a number of instances where licenses were granted to jobbers whose practices were previously considered unsatisfactory, they were granted after representation that the jobber's marketing practices would be changed. In at least an equal number of instances licenses were refused by defendants after similar representation.

Gasoline treated with fluid deteriorates with prolonged storage. Some applications for Ethyl jobber licenses and a few for regular gasoline jobber licenses have been refused because the volume of business of the jobber was not sufficient, in the opinion of defendant corporation, to move the

gasoline with sufficient rapidity to avoid deterioration in storage. A number of jobber licenses have been refused because in the opinion of defendant corporation the physical equipment of the jobber lent itself to the actual or accidental mixing of different grades or brands of gasoline or because [fol. 89] in the opinion of defendant corporation the retail outlets of the jobber were shabby or disreputable in appearance or location, or because in the opinion of defendant corporation the jobber's reputation in his community was bad, or because in the opinion of defendant corporation the jobber had a record of tax evasion, dilution, substitution, or misbranding. Employees of defendant corporation would testify that in passing upon applications for jobber licenses they were guided by their respective individual judgments as to what was in the best interests of the corporation in reference to the good will of the corporation with its refining licensees or the public.

19. Supplementary investigations of licensed jobbers are made from time to time and reports thereon made on the same report forms (Exhibits 17-A and 17-B hereto) as are used for the initial investigations.

20. Testimony of witnesses for the government would tend to establish that a large number of refiners and a majority of jobbers believe that a jobber must maintain "business ethics" in order to obtain a license, and that a number of jobbers believe that jobber licensees are required to maintain the prices and abide by the marketing practices and policies of the major oil companies. Defendants have not issued any statement or instructions to the effect that they would cancel licenses for such reason, and there has been and is a great deal of cutting of p ices below the posted prices on the part of licensed refiners, including major oil companies and licensed jobbers.

[fol. 90] 21. Defendants have refused to issue licenses to a number of jobbers who, investigation showed, were not abiding by the marketing policies prevailing or ostensibly prevailing in the industry or who were not maintaining the retail prices on gasoline posted generally in the industry or whose retail dealers were not maintaining said prices. Such marketing policies and posted prices were those adopted by the major oil companies or the market leaders among such companies, the major oil companies refining about

85 per cent of the gasoline sold in the United States and distributing the major portion of the gasoline sold throughout the United States through their own outlets and through jobbers. The operations of jobber licensees have been investigated by defendant corporation as hereinafter set forth to determine the method of securing supplies, gallonage, pump markings, facilities of bulk plant and nature of other physical equipment, number, character and appearance of outlets, sales effort, and whether the said licensees were maintaining the marketing policies, practices and prices prevailing or ostensibly prevailing in the industry. Defendants have issued licenses to a number of jobbers who, investigation showed, were not abiding by the prices prevailing or ostensibly prevailing in the industry or who were not maintaining retail prices on gasoline posted generally in the industry or whose retail dealers were not maintaining said prices prevailing or ostensibly prevailing in the industry. There are numerous instances where jobber licensees have not followed the marketing practices prevailing or ostensibly prevailing in the industry and where jobber licensees have not maintained retail prices posted gen- [fol. 91] erally in the industry concerning whom no action has been taken by defendants.

Some of the division managers and field representatives of defendant corporation have from time to time reported to the jobbers' suppliers that such jobbers have not been abiding by such suppliers' marketing policies and practices, and there have been sporadic instances in which representatives of defendant corporation in cooperation with the jobber suppliers, have persuaded jobbers to market gasoline in accordance with the suppliers' marketing practices.

22. 89% of the jobbers licensed by defendant corporation sold under a refiner's brand on Feb. 15, 1936, and 88% on Feb. 15, 1937, and 87% on Feb. 15, 1938, the remainder in each case selling under their own brand. Each time a jobber licensee who is selling under a refiner's brand changes his source of supply he is required to apply for a new license. Except in cases of breach of license agreement, or where the jobber's contract with the supplier had not been terminated (in which case the jobber's existing license was continued in effect) defendant corporation in most cases has granted a new license to a jobber who wanted to change his source of supply, irrespective of the jobber's mainte-

nance or non-maintenance (prior to or at the time of change) of the policies, practices, and prices of the major oil companies or market leaders. In a few instances it has not done so. Each jobber license contains a provision whereby either party is authorized to cancel such license without stating any reason therefor at any time upon thirty days' notice. Jobber licenses have not been cancelled because of the fail- [fol. 92] ure of a jobber to maintain the policies, practices, and prices of the major oil companies or market leaders.

23. On February 11, 1929 the petroleum industry adopted certain Trade Practice Conference Rules known in the industry as the Petroleum Code, attached hereto as Exhibit 23-A. On August 10, 1931, said code was modified, said modified code being attached hereto as Exhibit 23-B. As appears on Exhibits 23-A and 23-B, all of the provisions of said codes were either approved or accepted by the Federal Trade Commission. On August 19, 1933, the President approved The Code of Fair Competition for the Petroleum Industry, which was in effect until May 27, 1935. Said code is attached hereto as Exhibit 23-C. On September 5, 1937, the Federal Trade Commission issued an order, attached hereto as Exhibit 23-D, withdrawing its approval and acceptance of the Trade Practice Conference Rules adopted August 10, 1931 (Exhibit 23-B).

24. The defendant corporation has usually required that each jobber licensee purchase all his requirements of Ethyl gasoline from a single refiner-supplier of his own selection. Jobbers selling regular gasoline under their supplier's brands are required to purchase such gasoline from such supplier; otherwise jobbers selling regular gasoline may obtain their gasoline from any licensed supplier. The defendant corporation has in some cases refused a license to a jobber who desired to change his source of supply upon the ground that such jobber was, or was claimed by the refiner-supplier to be, under contract to purchase his Ethyl [fol. 93] or regular gasoline from an existing refiner-supplier, and that the request, if granted, would in the opinion of the defendant corporation have breached such contract or claimed contract. In a few of these cases the jobber has contended that his contract with the existing refiner-supplier had already been abrogated or for other reasons was not enforceable against him.

25. Since 1924 as to "Ethyl" and since 1933 as to "Q", defendant corporation has been and is the original and the exclusive user of trade-marks embodying the words "Ethyl" and "Q" as applied to fluid. All containers of fluid sold bear either the word "Ethyl" or the word "Q". Copies of registrations in the United States Patent Office, which are owned by defendant corporation, are attached hereto as follows:

Exhibit 25-A—Registration No. 187,410
Exhibit 25-B—Registration No. 202,275
Exhibit 25-C—Registration No. 215,282
Exhibit 25-D—Registration No. 292,242.

All licensees, except Standard Oil Company (New Jersey), include the word "Ethyl" as a part of the brand name under which Ethyl gasoline is sold, said company using the trade name "Esso" for most of its Ethyl gasoline and the name "Spartan Ethyl" for the rest of its Ethyl gasoline. All licensees are required to display the registered trade-mark design, Exhibit 25-C, whenever they sell, offer to sell or advertise Ethyl gasoline. No persons except such licensees and their customers have been or are users of the word "Ethyl" or of such trade-mark design for gasoline and the only gasoline for which such word and design have [fol. 94] been used is Ethyl gasoline as identified in this stipulation. Defendant corporation has also registered the word "Ethyl" and the aforesaid design, under state laws, in every state of the United States except one (Wisconsin), copies of the registrations in the State of New Jersey which may be taken as typical of all said state registrations, being attached hereto as Exhibits 25-E and 25-F. Since June, 1926 defendant corporation has carried on a large amount of advertising of the Ethyl trade-mark and Ethyl gasoline, including full page advertisements appearing frequently each year in a large number of popular magazines; and including billboard advertising. The refining licensees of defendant corporation have done a large amount of advertising of their respective brands of Ethyl gasoline. Numerous users of gasoline would testify that the name "Ethyl" and the aforesaid trade-mark design have become associated in their minds with high quality gasoline of high anti-knock qualities and that Ethyl indicates to them

the use of lead in gasoline. Defendant corporation has devoted efforts to promoting the use of regular gasoline by fleet owners (i. e., owners of truck, taxi, bus and like fleets) and other large users, oftentimes, in such promotional work, designating such gasoline as "Q" gasoline.

Exhibit 25-G, attached hereto, comprises copies of advertisements of regular gasoline (treated with fluid) which have been published in newspapers throughout the United States by licensees of defendant corporation; the advertisements in Exhibits 25-G, which were published as appearing thereon, being representative of a great many [fol. 95] similar advertisements, similarly describing regular gasoline, which have been published by many of defendant corporation's licensees (both refiners and jobbers) at those and other times, in a large number of newspapers and other periodicals (and on billboards and other media) throughout the country. Exhibit 25-H, attached hereto, comprises copies of advertisements published by defendant corporation in various magazines and newspapers, some of circulation to farmers and in rural districts, and others of urban and general circulation; the advertisements in Exhibit 25-H, which were published as appearing thereon, being representative of many similar advertisements,—similarly referring to the defendant corporation's manufacture of anti-knock fluid and tetraethyl lead, for regular gasoline,—which have been similarly published by defendant corporation in the years 1934, 1935 and 1936 and also since 1936. On occasion, filling station attendants, garage proprietors and workmen, automobile dealers and mechanics, and others having to do with the sale or recommendation of gasoline, have advised members of the gasoline-purchasing public that regular gasoline, as dispensed from pumps containing the lead warning sign, is "just about the same as Ethyl gasoline", or contains the same anti-knock ingredients as Ethyl gasoline, or contains lead "made by the Ethyl Gasoline people", or is "like Ethyl gasoline", or contains lead like Ethyl gasoline; or have otherwise passed on to the public, by word of mouth, their knowledge or belief that regular gasoline, dispensed from pumps containing lead warning signs, is related in some manner to Ethyl gasoline or to defendant corporation.

[fol. 96] The lead warning signs, Exhibits 14-C and 14-D (supplied by defendant corporation at a charge of seven

cents apiece), are used interchangeably on pumps dispensing Ethyl and regular gasoline, so that every filling station pump which dispenses Ethyl or regular gasoline treated with fluid has or should have one or more of these signs, disposed thereon in accordance with the proposed regulations of the Surgeon General. In recent years, lead signs of the type of Exhibit 14-D have been most used, and are now regularly supplied, for both Ethyl and "regular" pumps,—unless special request is made for the type 14-C, as where a new sign is desired for a pump already drilled to receive the sign 14-C. Except in instances not authorized by defendant corporation, the only gasoline dispensed to the public from filling station pumps which bear lead warning signs is gasoline treated with fluid manufactured by defendant corporation. The common practice of filling stations is to have the pumps for Ethyl and regular gasoline side by side, with the warning sign Exhibit 14-D similarly displayed on each; Exhibit 25-I, attached hereto, comprising photographs of typical pump arrangements in filling stations.

26. Each of the acts and practices of defendant corporation herein referred to has been done with or through, or under the authority, express or implied, of defendants, Webb and Taylor, except as otherwise noted herein.

27. While defendant corporation's license agreements are paraphrased in part herein, it is not intended to vary in [fol. 97] any respect the language of said agreements, to which final resort shall be had in the event of any dispute as to the interpretation of said agreements expressed in this stipulation.

John Henry Lewin, Hammond E. Chaffetz (W. B. Watson Snyder, Grant W. Kelleher, Special Assistants to the Attorney General.

Thurman Arnold, Assistant Attorney General; Lamar Hardy, United States Attorney.

Cooper, Kerr & Dunham, Solicitors for Defendants. Of Counsel: Drury W. Cooper, Harold W. Norman, Robert S. Dunham.

Dated: April 22, 1938.

[fol. 98] In United States District Court, Southern District of New York

E 84-321

United States of America, Petitioner,

against

Ethyl Gasoline Corporation, Earle W. Webb and John Coard Taylor, Defendants

Honorable Lamar Hardy, by John Henry Lewin, Esq., Hammond E. Chaffetz, Esq., W. B. Watson Snyder, Esq., Grant W. Kelleher, Esq., Nelson A. Scharfman, Esq., Thurman Arnold, Esq. and Samuel E. Darby, Jr., Esq., for the Petitioner.

Messrs. Cooper, Kerr & Dunham, by Drury W. Cooper, Esq., Harold W. Norman, Esq. and Robert S. Dunham, Esq., for Defendants.

Opinion

Boxdy, District Judge:

This is a suit in equity by the United States to enjoin the Ethyl Gasoline Corporation and its president and vice-president in charge of sales, from violating the Sherman Anti-Trust Act of July 2, 1890. The case has been submitted upon an agreed statement of facts.

[fol. 99] The defendant corporation is engaged in the production and sale of a fluid, consisting principally of tetraethyl lead. This fluid is used in increasing the octane, or anti-knock, rating of gasoline. The mixture of this fluid with gasoline reduces or eliminates the knocking that normally occurs when a mixture of gasoline and air is burned in an automobile engine of relatively high compression.

The defendant corporation is the sole producer of tetraethyl lead fluid in the United States. It is the owner of United States letters patent which cover the anti-knock fluid, the combination consisting of the fluid and gasoline, and the method whereby a mixture of gasoline and air is burned in a motor of relatively high compression, in the presence of vapors of an anti-knock ingredient. No other substance similar to tetraethyl lead fluid is manufactured

or sold commercially. There are other competitive methods by which a high octane value of gasoline may be obtained. Most refiners, however, find it economical and advantageous to obtain a part of the anti-knock value of their regular and premium gasoline by the use of fluid. Approximately 70% of all gasoline manufactured and sold in the United States is treated with fluid, and approximately 85% of all gasoline sold in the United States which has been processed [fol. 100] so as to obtain a high octane rating is treated with fluid.

The defendant corporation does not manufacture, refine or sell any gasoline. It manufactures fluid and sells it only to refiners licensed by it, who mix the fluid with their own gasoline pursuant to the regulations and directions prescribed by the defendant corporation. It derives its profits, which are very substantial, solely from the sale of fluid.

The greater part of all gasoline manufactured at refineries and the greater part of all gasoline treated with fluid, is sold and transported in interstate commerce from the states in which the refineries are located into each of the other states of the United States.

The refining companies sell gasoline partly through wholesale and retail outlets owned and controlled by them. They also sell gasoline to independent retail dealers and consumers and to jobbers for resale to retail dealers and consumers. There are approximately 12,000 jobbers in the United States. They distribute a substantial part of all the gasoline sold and distributed in this country.

The defendant corporation has issued licenses to approximately 123 refiners, who together refine and sell about 88% of all the gasoline sold in the United States. All but one of the major refiners in this country have entered into such license agreements and all but two of the licensees [fol. 101] treat with fluid substantially all of their regular or so-called house brands of gasoline. Defendant corporation licenses the refiners to produce "Ethyl" gasoline and "regular" gasoline, by treating their gasoline with the fluid manufactured and sold by it. Ethyl gasoline has a higher octane rating than regular lead-treated gasoline. The former contains approximately one part of fluid to 1700 parts of gasoline and the latter one part of fluid to 4200 parts of gasoline. About 94% of all gasoline treated with fluid is regular gasoline.

The license agreements with the refiners require each refiner to maintain a minimum differential in price between his Ethyl gasoline and his best non-premium grade of gasoline, and provide that regular gasoline treated with fluid shall be sold as the next highest priced motor fuel below the refiner's Ethyl gasoline and shall be the refiner's best non-premium gasoline.

The refiners are permitted under their licenses to sell treated gasoline to such jobbers only as are licensed by defendant corporation to distribute treated gasoline. This provision has almost invariably been complied with by the refiner licensees. Jobbers desiring licenses are required to make application therefor through their prospective refiner-suppliers, who submit such applications to the defendant [fol. 102] corporation. It issues separate licenses to jobbers for distributing Ethyl and regular treated gasoline. Approximately 11,000 of the 12,000 jobbers in the country have been granted such licenses. Numerous applications for jobber licenses have been denied. Many licenses were granted to persons to whom licenses were at first denied. Apart from the issuance of licenses to jobbers, the only business relations of defendant corporation with jobbers are in connection with the promotion of sales by jobbers of treated gasoline and the investigation of jobbers.

When tetraethyl fluid was first introduced, the question arose whether the manufacture, distribution and use of the fluid and of treated gasoline might not create a serious health hazard. An investigation was conducted by distinguished scientists appointed by the Surgeon General of the United States, who found that there was no serious menace to health if certain precautionary measures were taken. In conformity with the recommendations of the United States Public Health Service, the license agreements with jobbers provide that jobber licensees shall maintain on pumps from which treated gasoline is dispensed, notices that the gasoline contains lead and is for use as a motor fuel only.

The jobber licenses prohibit dilution and adulteration of the treated gasoline. On the rare occasions when dilution [fol. 103] or adulteration of regular treated gasoline has been discovered by the defendant corporation, it has ordinarily been necessary only to report the matter to the refiner-supplier, in view of the latter's interest in the quality of his product. Defendant corporation customarily investi-

gates instances where the lead warning signs have not been placed upon the dispensing pumps, and where untreated gasoline has been substituted for treated gasoline in pumps bearing such signs. It also seeks to prevent dilution of Ethyl gasoline and deterioration of such gasoline through long storage in jobbers' or dealers' tanks.

The Ethyl Gasoline Corporation is the exclusive user of trade-marks embodying the words "Ethyl" and "Q" as applied to fluid. All licensees except one, include the word "Ethyl" as a part of the brand name under which Ethyl gasoline is sold. All licensees are required to display defendant corporation's registered trade-mark design whenever they sell, offer to sell or advertise Ethyl gasoline. Defendant corporation has registered this design and the word "Ethyl" in every state of the United States except one. It has extensively advertised the Ethyl trade-mark and Ethyl gasoline, and the refiner licensees have extensively advertised their respective brands of Ethyl gasoline. [fol. 104] The defendant corporation, however, obligates its refiner and jobber licensees not to use its trade-marks, designs, or its name in the sale, offering for sale or advertising of regular lead-treated gasoline. It is stipulated that numerous users of gasoline would testify that the name "Ethyl" and the trade-mark design have become associated in their minds with high quality gasoline of high anti-knock qualities and that Ethyl indicates to them the use of lead in gasoline.

Since April, 1929 each applicant for a jobber license has been investigated by a field representative of the defendant corporation. These representatives exercise wide discretion in recommending the granting or refusal of jobber licenses and their recommendations largely determine whether a license will be issued. Officials of the corporation charged with reviewing these jobber reports have almost invariably adopted the field representative's recommendation when approved by his division manager. The action of the division manager in this regard is usually perfunctory.

A manual issued by the corporation to its field representatives states that the reason for investigations prior to the issuance of license agreements is to ensure that all marketers of Ethyl gasoline will be of a high type and will be [fol. 105] people who will maintain the quality of the gasoline, protect the reputation that the Ethyl corporation has

established for its product and will not resort to unethical methods in competing with other licensed jobbers and refiners.

Following the corporation's customary practice, its field representatives usually have not set forth the reasons why recommendations have been made against the issuance of licenses, largely due to its reluctance to preserve in its records the extent to which maintenance of gasoline prices and marketing policies by jobbers entered into the granting of licenses. Usually no records other than the reports themselves have been made or preserved disclosing the reasons why jobber licenses have been refused. The extent of the reliance placed by the corporation on the "business ethics" of jobbers has normally not been disclosed in its records and communications. Defendants employed the term "business ethics" to denote compliance with marketing policies and prevailing prices of the petroleum industry.

From April, 1929 to January, 1935 one of the questions appearing on the form of jobber report related to the "business ethics" of the jobber applicant. In January, 1935, this question was eliminated from the form of the jobber report, but the "business ethics" of the jobber have continued to [fol. 106] be among the principal subjects of investigation. The findings of the field representatives with respect thereto are incorporated in the recommendations for or against the issuance of a license, made at the end of the report.

An adverse finding upon the "business ethics" of a prospective jobbers licensee is alone in many instances sufficient ground for defendant corporation to refuse such jobber a license. The greatest number of jobber applicants who were denied licenses (and numerous applications have been denied) were rejected on the basis of adverse findings of field representatives concerning the jobbers' "business ethics." In a number of instances where licenses were granted to jobbers whose practices were previously considered unsatisfactory, they were issued after representation that the jobber's marketing practices would be changed. In at least an equal number of instances, licenses were refused by defendants after similar representations.

It is also stipulated that defendants have refused to issue licenses to a number of jobbers who, investigation showed, were not abiding by the marketing policies prevailing or ostensibly prevailing in the industry or who were not maintaining the retail prices on gasoline posted generally in

the industry (that is, the policies of, and prices posted by, [fol. 107] the major oil companies or the market leaders among such companies) or whose retail dealers were not maintaining such prices.

It is stipulated that testimony of witnesses for the Government would tend to establish that a large number of refiners and a majority of jobbers believe that a jobber must maintain "business ethics" in order to obtain a license, and that a number of jobbers believe that jobber licensees are required to maintain the prices and abide by the marketing practices and policies of the major oil companies.

Supplementary investigations of licensed jobbers are made from time to time by the defendants and reports thereon made on the same report forms as are used for the initial investigation. The operations of jobber licensees have been investigated partly to determine whether they were maintaining the marketing policies, practices and prices prevailing or ostensibly prevailing in the industry. In the corporation's instructions to its field representatives, it states that through these supplementary investigations it has been able to correct the Ethyl marketing picture to a considerable extent and has succeeded in eliminating from its jobber lists some of its former accounts which were not a credit to it.

Some of the division managers and field representatives have from time to time reported to the jobbers' suppliers that jobbers have not been abiding by the suppliers' market- [fol. 108] ing policies and practices, and there have been sporadic instances in which representatives of defendant corporation in cooperation with the suppliers, have persuaded jobbers to market gasoline in accordance with the suppliers' marketing practices.

Some applications for Ethyl jobber licenses and a few for regular gasoline jobber licenses have been refused because the volume of business of the jobber was not sufficient, in the opinion of defendant corporation, to move the gasoline with sufficient rapidity to avoid deterioration in storage. A number of jobber licenses have been refused because in the opinion of defendant corporation the physical equipment of the jobber lent itself to the actual or accidental mixing of different grades or brands of gasoline, or the retail outlets of the jobber were shabby or disreputable in appearance or location, or the jobber's reputation in his community

was bad, or the jobber had a record of tax evasion, dilution, substitution or misbranding.

Defendant corporation has issued licenses to a number of jobbers who, investigation showed, were not abiding by the prices prevailing or ostensibly prevailing in the industry or who were not maintaining retail prices on gasoline posted generally in the industry or whose retail dealers were not [fol. 109] maintaining the prices prevailing or ostensibly prevailing in the industry.

Defendant corporation has investigated the operations of jobber licensees to determine the method of securing supplies, gallonage, pump markings, facilities of bulk plant and nature of other physical equipment, number, character and appearance of outlets and sales effort.

Defendants have not issued any statement or instructions to the effect that they would cancel licenses for the failure to maintain "business ethics" and there has been and is a great deal of cutting of prices below the posted prices on the part of licensed refiners, including major oil companies, and licensed jobbers. Jobber licenses have not been cancelled because of the failure of a jobber to maintain the policies, practices and prices of the major oil companies or market leaders. There are numerous instances where jobber licensees have not followed the marketing practices prevailing or ostensibly prevailing in the industry and where jobber licensees have not maintained retail prices posted generally in the industry concerning whom no action has been taken by defendants. Except in cases of breach of license agreement, or where the jobber's contract with his supplier had not been terminated (in which case the jobber's [fol. 110] existing license was continued in effect) defendant corporation in most cases has granted a new license to a jobber who wanted to change his source of supply, irrespective of the jobber's maintenance or non-maintenance of the policies, practices and prices of the major oil companies of market leaders. In a few instances it has not done so.

The petition prays that the monopoly, combination and conspiracy described therein be declared illegal and in violation of the Sherman Anti-Trust Act; that the defendants be enjoined from continuing the unlawful practices described and, particularly, from exacting agreements from the refiners limiting the sale of lead-treated gasoline to such jobbers only as defendants license or otherwise designate, and from requiring jobbers to procure licenses.

The Government in its brief states that "this case is concerned only with the legality of that part of the defendants' licensing system and practices which relates to gasoline jobbers, whereby refiner licensees have each agreed with defendant corporation to sell fluid treated gasoline to such jobbers only as have received licenses from the defendant corporation."

The Government contends that the defendants have imposed unlawful restraints first, upon jobbers to whom licenses have been issued, by compelling them to participate [fol. 111] in agreements or understandings to maintain resale prices, and second, upon jobbers to whom licenses have been denied, who have been excluded from the market as a result of defendants' agreements with the refiner licensees.

First. A price maintenance agreement between a manufacturer or trader and his dealers is forbidden by the Sherman Act. Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U. S. 373. The interdiction of the statute extends to informal agreements implied from a course of dealing or other circumstances. United States v. A. Schrader's Son, Inc., 252 U. S. 85; Federal Trade Commission v. Beech-Nut Packing Co., 257 U. S. 441; cf. Frey & Son, Inc. v. Cudahy Packing Co., 256 U. S. 208. No immunity is conferred by the fact that the article whose price is being regulated is a patented product. Bauer & Cie. v. O'Donnell, 229 U.S. 1; Straus v. Victor Talking Machine Co., 243 U. S. 490.

In the absence of an agreement or understanding between them, or of the suppression of the freedom of competition by methods in which the manufacturer secures the cooperation of his distributors and customers, Federal Trade Commission v. Beech-Nut Packing Co., 257 U. S. 441, 455, it is [fol. 112] not unlawful for a manufacturer to suggest resale prices to his dealers, refuse to sell goods to those who do not maintain those prices and announce to the trade that such is his policy. United States v. Colgate & Co., 250 U. S. 300; Frey & Son, Inc. v. Cudahy Packing Co., supra. These activities are considered lawful incidents of the right of a "trader or manufacturer engaged in an entirely private business freely to exercise his own independent discretion as to parties with whom he will deal." United States v. Colgate & Co., 250 U. S. 300, 307. The investigation by a manufacturer of the price policies of his dealers is not per se unlawful, Toledo Pipe-Threading Machine Co. v. Federal Trade Commission, 11 F. (2d) 337; Cream of Wheat Co. v.

Federal Trade Commission, 14 F. (2d) 40, although when combined with other significant facts, it may support a finding of unlawful price control. Federal Trade Commission v. Beech-Nut Packing Co., supra.

It is evident that while the distinctions between lawful and unlawful activities may be quite clear in theory, it is not always easy in practice to determine whether the trader has kept within the bounds of his privilege. It is unfortunate, therefore, that the present case has been submitted upon an agreed statement of facts, thus depriving the court [fol. 113] of the benefit of the direct testimony of witnesses.

The defendant corporation, although neither a manufacturer of, nor trader in, lead-treated gasoline, concededly takes an interest in and investigates, the price policies of its jobber licensees and of applicants for jobber licenses, and it is also admitted that jobbers have been refused licenses because their price policies were offensive to the defendant corporation. But although a majority of jobbers believe that a jobber must have maintained resale prices in order to obtain a jobber license and a number of them also believe that they are required to maintain prices after the issuance of a license, there is no evidence that the defendants have informed any jobber to that effect and it affirmatively appears that defendants have not issued any statement or instructions that they would cancel licenses for failure to maintain prices. Moreover, there has been and is a great deal of price cutting on the part of licensed jobbers, yet licenses have not been cancelled for that reason.

It is stipulated that in a number of instances where licenses were granted to jobbers whose "practices" were previously considered unsatisfactory, they were issued after representation that the jobbers "marketing practices" would be changed; that some of the defendant corporation's employees have from time to time reported to the jobbers' [fol. 114] suppliers that jobbers have not been abiding by the suppliers' "marketing policies and practices", and that there have been sporadic instances in which representatives of defendant corporation, in cooperation with the jobbers' suppliers, have persuaded jobbers to market gasoline in accordance with the suppliers' "marketing practices". The Government relies heavily upon these facts. But it is not certain that the "marketing policies" and "marketing practices" referred to, include "price policies", in view of the separate and apparently distinctive

use of these terms in the stipulation of facts. Although the stipulation of facts defines "business ethics" as including the "marketing policies and prevailing prices of the petroleum industry", it does not state that "marketing policies" or "marketing practices" are synonymous with "price policies".

A clear case of price maintenance thus is not made out, especially in view of the indefinite language of the stipulation. That an agreement or understanding for the maintenance of prices existed between defendants and their jobber licensees is perhaps a permissible but not a necessary conclusion from the stipulated facts. As the case can be disposed of on other grounds, it is unnecessary to pass upon this issue.

[fol. 115] Second. The Ethyl Gasoline Corporation has entered into license agreements with approximately 123 refiners, who together refine and sell about 88% of all the gasoline sold in the United States. These include all except one of the major refiners in this country. Each of the refiner license agreements provides that lead-treated gasoline may be sold to those jobbers only who are licensed by the defendant corporation and this provision is almost invariably complied with by the refiner licensees. Since the defendants have denied numerous applications for jobber licenses, many persons desiring to engage as jobbers in the sale of lead-treated gasoline, which comprises about 70% of all the gasoline manufactured and sold in the United States, have been excluded from the market. The unsatisfactory "business ethics" of the jobbers has been the principal reason for such exclusion.

This provision of the refiner license agreements clearly is in restraint of trade. Each agreement calls for cooperative action between the defendant corporation and its refiner licensee in the exclusion of unlicensed jobbers from the market. While a manufacturer or trader may refuse to deal with those who do not observe the resale prices suggested by him, he may not combine or enter into agreements [fol. 116] with intermediate distributors to cut off the supplies of such dealers. Victor Talking Machine Co. v. Kemeny, 271 Fed. 810; Straus v. Victor Talking Machine Co., 297 Fed. 791; cf. Federal Trade Commission v. Beech-Nut Packing Co., supra. Although this record may not warrant a finding that the refiner licensees have entered into a combination or conspiracy with each other and with the

defendants, the conceded facts are that one hundred and twenty-three exclusion agreements have been separately made by the defendants and their refiner licensees. Each such agreement deprives the unlicensed jobber of one source of supply, while the aggregation of agreements deprives him of all access to the lead-treated gasoline market. Defendants, through these separate agreements, have accomplished what the refiners, without the defendants' aid, could achieve only by a concerted refusal to deal with the jobbers who did not maintain "business ethics". The defendants can fare no better with their system of separate agreements than could the refiners if they formed such a combination. See Dr. Miles Medical Co. v. John D. Park & Sons, 220 U. S. 373, 408. The agreements between the defendants and their refiner licensees accordingly constitute a forbidden restraint of trade. Cf. Straus v. American Publishers' Association, 231 U. S. 222; Eastern States Retail Lumber [fol. 117] Dealers' Association v. United States, 234 U. S. 600; Binderup v. Pathe Exchange, 263 U. S. 291; United States v. American Livestock Commission Co., 279 U. S. 435; United States v. First National Pictures, Inc., 282 U. S. 44; United States v. Sugar Institute, 297 U. S. 353.

The defendants, attempting to establish the reasonableness of their actions, Standard Oil Co. v. United States, 221 U. S. 1; United States v. American Tobacco Co., 221 U. S. 106; Sugar Institute, Inc. v. United States, 297 U. S. 553; Interstate Circuit, Inc. v. United States, decided by the Supreme Court February 13, 1939, contend that they have the right to require that jobbers dealing in lead-treated gasoline be licensed, in order to preserve the trade-marks, good will and reputation of defendant corporation in lead-treated gasoline, to protect the public from adulteration and to secure compliance with the regulations proposed by the Surgeon General of the United States governing the sale of lead-treated gasoline to the public. These objectives, however, bear no relation to, and, in the absence of statutory permission, do not require or justify, the exclusion from the market of jobbers because their marketing or price policies are repugnant to the defendants. It is because the defendants have not confined themselves to the attainment of the ends mentioned but have used their licensing system for other purposes that the Government seeks to restrain their [fol. 118] licensing activities. Cf. Sugar Institute, Inc. v. United States, 297 U. S. 553, 599, 601.

Defendants maintain that they are vitally interested in protecting the health of persons handling lead-treated gasoline and in securing compliance with the regulations proposed by the Surgeon General of the United States. While it may be true, as the Government contends, that the health hazard relates to the handling of the tetraethyl fluid itself and not to the fluid-treated gasoline, the court can not say that the defendants have not a legitimate interest in the maintenance of lead warning notices on the pumps from which treated gasoline is dispensed to the public, which apparently is the only one of such health regulations applicable to the handling and distribution of treated gasoline by jobbers.

The refiner licenses contain a provision, which is not attacked in this suit, requiring refiners, first, to obligate their jobbers to comply with the health regulations and to impose similar obligations upon purchasers from them for resale, and second, to reserve the right to cancel contracts of sale in the event that the jobber does not comply with such regulations. Defendants contend that the refiner has been tried and found wanting, but this apparently was due [fol. 119] to an unwillingness on the part of refiners to conduct their own investigations of the jobbers' retail outlets. There does not appear to be any reason why this provision in the refiner license agreements can not accomplish its purpose when supplemented by investigations conducted by the defendant corporation itself, just as is presently done. The court is not concerned with determining defendants' future policies or practices regarding the enforcement of these health regulations, but the court is satisfied that the jobber licensing system is not the only method by which observance of the health regulations by jobbers can be enforced. Moreover, as the Government points out, there would seem to be a complete absence of any temptation on the part of jobbers to avoid compliance with the regulations concerning lead warning signs since these signs are supplied by the Ethyl corporation at a charge of only seven cents each.

It is equally evident that whatever interests the defendant corporation has in preventing dilution, adulteration and deterioration of treated gasoline in the hands of jobbers may be protected without any resort to the jobber license device. Cf. International Business Machines Corp. v. United States, 298 U. S. 131, 139, 140.

Defendants seek to avoid the effect of the anti-trust laws [fol. 120] and to support their requirement that jobbers be licensed on the ground that they are merely taking advantage of their patent rights, relying upon the nature of patent monopoly and the decision of the Supreme Court in United States v. General Electric Co., 272 U. S. 476.

The defendant corporation concededly is entitled to the full benefit of its patents. But the rights which attach to the ownership of a patent are not limitless. The courts have frequently defined and limited the scope of the patent monopoly.

In the General Electric case, 272 U. S. 476, 489, 490, the Supreme Court established the principle that a patentee may grant a license "upon any condition the performance of which is reasonably within the reward which the patentee by the grant of the patent is entitled to secure," and may restrict the selling of the patented article by his licensee by limiting the method of sale and the price, "provided the conditions of sale are normally and reasonably adapted to secure pecuniary reward for the patentee's monopoly." See also General Talking Pictures Co. v. Western Electric Co., 305 U. S. 124, 127. The reasoning in both cases establishes that the legality of the conditions imposed by the patentee upon his licensee is a question to be determined by the court and not, as contended by defendants, a question of [fol. 121] policy reserved for the judgment of the patentee. In the General Electric case both the patent owner and its licensee manufactured and sold the patented product. The court merely decided that the patent owner could fix the prices and prescribe the method of sale of the patented product manufactured by the licensee in order to sustain the prices at which the former sold the patented product. See E. Bement & Sons v. National Harrow Co., 186 U. S. 70; Straight Side Basket Corp. v. Webster Basket Co., 82 F. (2d) 245, 246.

The defendant corporation does not charge any royalty for the use of its patents, nor does it manufacture, refine or sell any gasoline, whether treated with fluid or not. It is engaged only in the sale of fluid and derives its profits solely from the sale of fluid to its refiner licensees. Its pecuniary interest, if any, in the marketing and price policies of the jobbers selling gasoline is obviously very remote. Cf. Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U. S. 373, 407; Bauer & Cie. v. O'Donnell, 229 U. S. 1, 16.

Moreover, the Ethyl Gasoline Corporation does not itself determine the prices or policies, the failure to abide by which has often resulted in the denial of a jobber license. They are the prices and policies established by some of the refiner licensees, apparently without consulting the defend- [fol. 122] ant corporation. There is no evidence that the refiner licensees can not adequately protect such interests as they may lawfully have in the maintenance of the resale prices of their jobber customers, without any intervention by the Ethyl corporation.

General Talking Pictures Co. v. Western Electric Co., supra, involved a limitation in a license to manufacture and sell a patented product, restricting the licensee to sales of the product for private use in radio reception, as distinguished from commercial use in talking picture equipment. Since the patentee therein retained the right to license other persons to manufacture and sell the product for use in the commercial field, the limitation obviously bore a direct relation to the patentee's pecuniary reward. The Ethyl Gasoline Corporation, however, does not restrict sales of treated gasoline by refiners to licensed jobbers so as to enable it to exploit sales to the excluded group in some other way. Rather its restrictions result in the perpetual exclusion of non-licensed jobbers from the market of lead-treated gasoline, thus depriving its refiner licensees of the opportunity to sell to the excluded group.

In so far, therefore, as the provisions of the refiner license agreements are used to exclude from the market jobbers [fol. 123] who do not maintain "business ethics", the court believes that they are not conditions "normally and reasonably adapted to secure pecuniary reward for the patentee's monopoly." United States v. General Electric Co., 272 U. S. 476, 490.

The defendant corporation attempts to identify its position with that of a manufacturer or trader and contends that, as the latter possesses the privilege of selecting his own customers, see United States v. Colgate & Co., 250 U. S. 300, so the defendant corporation may select the jobbers to be licensed, upon any basis satisfactory to itself. This argument, however, ignores the fact that the defendant corporation is not selecting its own customers when it determines what jobbers may sell lead-treated gasoline. The Ethyl Gasoline Corporation manufactures tetraethyl fluid; its sole customers are its refiner licensees. Its selection of refiner

licensees is not under attack. The jobber is in no sense a dealer in the article manufactured by this corporation. The jobber is a dealer in lead-treated gasoline, of which the defendant corporation produces merely an ingredient. It is the refiner and not the Ethyl Gasoline Corporation, who produces lead-treated gasoline. The government does not question the right of each refiner licensee to make an inde-
[fol. 124] pendent selection of his jobber customers.

The facts of the case do not fall within the permissive provisions of the amendment to section one of the Sherman Anti-Trust Act effected by the Act of August 17, 1937, 50 Stat. 693, 15 U. S. Code, Sec. 1, and the defendants do not contend that this amendment has any application to the facts of this case.

The court accordingly is of the opinion that the agreements between the Ethyl Gasoline Corporation and its refiner licensees restricting sales of treated gasoline to those jobbers only whom the former licenses, unreasonably restrain trade and are violative of the Sherman Anti-Trust Act.

The defendants accordingly will be enjoined from requiring jobbers to procure licenses for handling lead-treated gasoline and from requiring refiners to sell lead-treated gasoline to such jobbers only as defendant corporation licenses or otherwise designates.

Submit proposed findings of fact and conclusions of law in accordance herewith.

May 19, 1939.

Wm. Bondy, United States District Judge.

[fol. 125] In United States District Court

[Title omitted]

Findings of Fact and Conclusions of Law

Pursuant to Rule 52 (a) of the Rules of Civil Procedure, I find the facts specially and state separately by my conclusions of law thereon, as follows:

Findings of Fact

The parties in this cause having entered into a stipulation which provides that the issues raised by the pleadings

should be determined without the introduction of other evidence on the basis of the facts as therein stipulated, I adopt, find, and incorporate herein by reference the facts as stipulated by the parties and find:

1. By providing that the refiner licensee may sell lead-treated gasoline only to those jobbers who are licensed by the defendant corporation, each refiner license agreement calls for cooperative action between the defendant corporation and its refiner licensee in the exclusion of unlicensed jobbers from dealing or trading in lead-treated gasoline. The 123 refiner license agreements have been separately made by the defendants and their refiner licensees. Each such agreement deprives the unlicensed jobber of one source of supply, while the aggregation of agreements deprives him of all access to the lead-treated gasoline market as a jobber.

2. Many persons desiring to engage as jobbers in the sale of lead-treated gasoline, which comprises about 70% of all the gasoline manufactured and sold in the United States, have been excluded from the market by defendant corporation. The unsatisfactory "business ethics" of the jobbers has been the principal reason for such exclusion.

[fol. 126] 3. Defendant corporation in administering its jobber licensing system has not confined itself to employing it for the purpose of preserving the trade marks, good will or reputation of defendant corporation in lead-treated gasoline, protecting the public from adulteration, or securing compliance with the regulations proposed by the Surgeon General of the United States governing the sale of lead-treated gasoline to the public.

4. Exclusion from the market of jobbers because their marketing or price policies are repugnant to the defendants bears no relation to, and is not required for the purpose of, preserving the trade marks, good will or reputation of defendant corporation in lead-treated gasoline, protecting the public from adulteration, or securing compliance with the regulations proposed by the Surgeon General of the United States governing the sale of lead-treated gasoline to the public.

5. Maintenance of warning notices on the pumps from which lead-treated gasoline is dispensed to the public is the

only one of the health regulations proposed by the Surgeon General of the United States which is applicable to the handling and distribution of lead-treated gasoline by jobbers.

6. It can not be said that the defendants have not a legitimate interest in the maintenance of lead warning notices on such pumps. Defendants' system of licensing jobbers is not the only method by which observance by jobbers of the health regulations proposed by the Surgeon General can be enforced.

7. Jobbers are under no temptation to avoid compliance with the regulation proposed by the Surgeon General of the United States concerning lead warning signs, since these signs are supplied by the Ethyl corporation at a charge of only seven cents each.

8. Whatever interests the defendant corporation has in preventing dilution, adulteration or deterioration of lead-treated gasoline in the hands of jobbers may be protected without resort to the jobber licensing device.

9. The defendant corporation does not charge any royalty for the use of its patents, nor does it manufacture, refine or sell any gasoline, whether treated with ethyl fluid or not. [fol. 127] It is engaged only in the sale of ethyl fluid and derives its profits solely from the sale of ethyl fluid to its refiner licensees. The defendant corporation's pecuniary interest, if any, in the marketing and price policies of the jobbers selling lead-treated gasoline is very remote.

10. The defendant corporation does not itself determine the prices or policies, the failure to abide by which has often resulted in the denial of a jobber license. They are the prices and policies established by some of the refiner licensees.

11. There is no evidence that the refiner licensees can not adequately protect such interests as they may lawfully have in the maintenance of resale prices by their jobber customers, without any intervention by the defendant corporation.

12. The refiners, not the defendant corporation, produce lead-treated gasoline; jobbers are the customers of the refiners, not of the defendant corporation; and the latter is

not selecting its own customers when it determines what jobbers may sell lead-treated gasoline.

13. There is no evidence that the defendants have informed any jobber to the effect that a jobber must have maintained resale prices in order to obtain a jobber license or that they have informed any jobber that jobbers are required to maintain prices after the issuance of a license.

14. There has been and is a great deal of price cutting on the part of licensed jobbers, yet licenses have not been cancelled for that reason.

15. The petitioner has failed to establish a clear case of price maintenance through agreement or understanding with jobbers.

Conclusions of Law

1. The court has jurisdiction of this cause under the provisions of the Act of July 2, 1890 entitled "An Act to Protect Trade and Commerce Against Unlawful Restraints and Monopolies".

2. A manufacturer or trader may refuse to deal with those who do not observe the resale prices suggested by him, but he may not combine or enter into agreements with intermediate distributors to cut off the supplies of such dealers.

[fol. 128] 3. The defendants, through their 123 separate agreements with their refiner licensees excluding unlicensed jobbers from the market of lead-treated gasoline, have accomplished what the refiners, without the defendants' aid, could achieve only by a concerted refusal to deal with the jobbers who did not maintain "business ethics" but the defendants can fare no better with their system of separate agreements than could the refiners if they formed such a combination.

4. The question whether conditions imposed by a patentee upon a licensee are normally and reasonably adapted to secure pecuniary reward to which the patentee is entitled by reason of the patent monopoly is a question to be determined by the Court under all the circumstances of the case and is not a question of policy reserved for the judgment of the patentee.

5. Insofar as the provisions of the refiner license agreements are used to exclude from the lead-treated gasoline market jobbers who do not maintain "business ethics", they are not conditions normally and reasonably adapted to secure pecuniary reward for the defendant corporation's patent monopoly and they are not within any privileges or immunities which the patent law confers upon the defendant corporation by virtue of its patents.

6. The effective prevention of exclusion of jobbers from the business of marketing lead-treated gasoline because their price policies, marketing policies and practices are repugnant to the defendants requires that the entire jobber licensing system of defendant corporation be abolished and restrained.

7. The defendants by requiring refiner licensees to whom they sell ethyl fluid to agree to sell gasoline treated with this fluid to those jobbers only who are licensed by the defendant corporation to distribute such treated gasoline, having entered into agreements in unreasonable restraint of interstate trade and commerce, in violation of said act of July 2, 1890.

8. The petitioner is entitled to an injunction restraining the defendants from enforcing or attempting to enforce any provisions in their licensing agreements with refiners which require said refiners not to sell lead-treated gasoline to jobbers who do not hold a license from the defendant corporation.

9. The petitioner is entitled to an injunction restraining the defendants from requiring jobbers to procure licenses [fol. 129] for handling lead-treated gasoline, and from requiring refiners not to sell lead-treated gasoline to jobbers who do not hold a license from the defendant corporation, and from entering into any combination or conspiracy in restraint of interstate trade or commerce similar to that herein declared to be illegal.

Wm. Bondy, United States District Judge.

August 14th, 1939.

[fol. 130] IN UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

In Equity No. 84-321

UNITED STATES OF AMERICA, Petitioner,

vs.

ETHYL GASOLINE CORPORATION, EARLE W. WEBB and JOHN COARD TAYLOR, Defendants

FINAL DECREE

This cause having come on for hearing before this Court upon the pleadings and the agreed statement of facts, and having been argued by counsel, and the Court having filed its opinion herein on the 19th day of May 1939,

It is hereby Ordered, Adjudged and Decreed as follows:

I. That the defendants, Ethyl Gasoline Corporation, Earle W. Webb and John Coard Taylor, by requiring the refiner licensees to whom they sell the ethyl fluid which the defendant corporation manufactures to agree not to sell gasoline treated with said ethyl fluid (such gasoline being referred to herein as lead-treated gasoline) to any jobber or other reseller, who does not hold a license from the defendant corporation to sell lead-treated gasoline, have entered into agreements in restraint of interstate trade and commerce in violation of an act of Congress approved July 2, 1890, entitled "An act to Protect Trade and Commerce against Unlawful Restraints and Monopolies".

II. That the provisions of each license agreement now in effect between the defendant corporation and its refiner licensees which prohibit, or purport to prohibit, the refiner licensee from selling lead-treated gasoline to any jobber who does not hold a license from the defendant corporation to sell lead-treated gasoline are illegal, null and void, and [fol. 131] that the defendant corporation forthwith cancel said provisions and give due written notice, within twenty (20) days from the date of this decree, to each such refiner licensee that the said provisions have been cancelled and are of no effect.

III. That all licenses now outstanding issued by the defendant corporation to jobbers purporting to authorize jo-

bers to sell lead-treated gasoline are illegal, null and void, and that the defendant corporation forthwith cancel said licenses and give due written notice, within sixty (60) days from the date of this decree, to each such jobber that the license with such jobber has been cancelled and is of no effect, together with a true copy of this decree.

IV. That the defendant corporation and its officers, agents, representatives and employees, and each individual defendant, be, and they hereby are, perpetually enjoined and restrained:

(1) From enforcing or attempting to enforce any provision in any license agreement between the defendant corporation and any refiner of gasoline which prohibits or purports to prohibit the refiner licensee from selling lead-treated gasoline to any jobber, or other reseller, who does not hold a license from the defendant corporation to sell lead-treated gasoline.

(2) From including in any agreement which the defendant corporation may hereafter enter into or offer to enter into with any refiner that the refiner shall not sell lead-treated gasoline to any jobber, or other reseller, who does not hold a license from the defendant corporation to sell lead-treated gasoline.

(3) From enforcing or attempting to enforce the provisions of any agreement by which the defendant corporation licenses or purports to license any jobber, or other reseller, to sell lead-treated gasoline.

(4) From requiring or attempting to require that jobbers, or other resellers, procure a license from the defendant corporation to sell lead-treated gasoline in order to be able to buy, sell or otherwise deal in lead-treated gasoline as jobbers or as other resellers.

(5) From entering into or carrying out any agreement in restraint of interstate trade or commerce similar to the agreements declared to be illegal in paragraph I of this decree, or any combination or conspiracy of similar character.

V. That jurisdiction of this cause is hereby retained for [fol. 132] the purpose of enforcing this decree and of making such other and further orders or decrees as may become necessary herein.

VI. That the petitioner recover of the defendants its costs herein.

August 14, 1939.

(Sd.) Wm. Bondy, United States District Judge.

Notice of Entry is hereby waived.

Cooper, Kerr & Dunham, Solicitors for Defendants.

[fol. 133] In United States District Court

[Title omitted]

Order Staying Execution of Decree

Upon application of the defendants for a stay pending appeal and determination thereof, the petitioner not objecting, it is

Ordered: That execution of the final decree entered herein, and issuance of any injunction pursuant to said decree, and compliance by defendants with any provision of said decree, be and the same hereby are stayed pending final determination of this cause, either upon appeal or by expiration of the time for appeal without the defendants having taken an appeal.

(Sd.) William Bondy, United States District Judge.

August 14, 1939.

[fol. 134] Supreme Court of the United States

[Title omitted]

Petition for Appeal

Considering themselves aggrieved by the final order and decree of the District Court of the United States for the Southern District of New York, in the above-entitled cause, entered August 14, 1939, the defendants, Ethyl Gasoline Corporation, Earle W. Webb, and John Coard Taylor, hereby pray that an appeal be allowed to the Supreme Court of the United States and for an order fixing the amount of bond thereon. The Supreme Court of the United States has jurisdiction of this appeal. Judicial Code, Sec. 238,

as amended, 28 U. S. C. Sec. 345; Act of Feb. 11, 1903, c. 544, Sec. 2, 32 Stat. 823, as amended, 15 U. S. C. Sec. 29.

ASSIGNMENT OF ERRORS

And the said defendants assign the following errors in the record and proceedings in the said cause:

I

The court erred in holding that the conditions in the refiner license agreement restricting sales of the patented lead-treated gasoline to licensed jobbers are not normally and reasonably adapted to secure pecuniary reward for [fol. 135] the patentee within the rights conferred by the patent law.

II

The court erred in finding that the defendant corporation in administering its jobber licensing system had not confined itself to preserving the trademarks, good will or reputation of the defendant corporation in the patented lead-treated gasoline, protecting the public from adulteration, or securing compliance with the regulations proposed by the Surgeon General of the United States governing the sale of the patented lead-treated gasoline to the public.

III

The court erred in finding that the refusal to license jobbers because of their marketing or price policies bears no relation to the preserving of the trademarks, good will or reputation of the defendant corporation in its patented lead-treated gasoline, protecting the public from adulteration, or securing compliance with the Surgeon General's regulations.

IV

The court erred in finding, on the basis of speculative and unwarranted inferences from the stipulated facts, that the maintenance of warning notices on pumps from which the patented lead-treated gasoline is dispensed to the public is the only one of the health regulations proposed by the Surgeon General of the United States which is applicable to the handling and distribution of the patented lead-treated gasoline by jobbers.

V

The court erred in finding, in the same speculative manner, that the defendants' system of licensing jobbers is not the only method by which observance by such jobbers of such health regulations can be enforced.

[fol. 136]

VI

The court erred in finding, on improper inferences from the stipulated facts, that whatever interest the defendant corporation has in preventing dilution, adulteration or deterioration of the patented lead-treated gasoline in the hands of jobbers may be protected without jobber licenses.

VII

The court erred in concluding that the defendant corporation's pecuniary interest in the marketing and price policies of the jobbers selling the patented and trademarked lead-treated gasoline is very remote.

VIII

The court erred in failing to distinguish between the license agreements and practices with respect to the manufacture and sale of the patented lead-treated gasoline ultimately sold at retail under the Ethyl trademark owned by the defendant corporation, and the license agreements and practices concerning the patented lead-treated gasoline sold under refiner or jobber tradenames alone.

IX

The court erred in failing to recognize the pecuniary interest of the defendant corporation, as a patentee, in the distribution and sale of its patented and trade-marked lead-treated gasoline, arising out of its ownership of patents covering lead treated gasoline and the patent covering the use of lead-treated gasoline in internal combustion engines, as distinguished from its patents relating to fluid.

X

The court erred in concluding that the defendants' system of jobber licenses must be regarded as the legal equivalent of a combination among its refiner licenses with respect to distribution and sale of an unpatented product.

[fol. 137]

XI

The court erred in holding that by requiring its refiner licensees to sell only to licensed jobbers the defendants have entered into agreements in unreasonable restraint of interstate commerce.

XII

The court erred in holding that the effective prevention of exclusion of jobbers from the business of marketing the patented lead-treated gasoline because of their price policies, marketing policies and practices requires that the entire jobber licensing system of defendant corporation be abolished and enjoined.

XIII

The court erred in decreeing that the provisions in refiner license agreements prohibiting the sale by licensees of the patented lead-treated gasoline to unlicensed jobbers are illegal, null and void and in requiring their cancellation, with written notice, within twenty (20) days.

XIV

The court erred in decreeing that all jobber licenses are illegal and in decreeing their cancellation, with written notice, within sixty (60) days.

XV

The court erred in enjoining the enforcement of any provision in any refiner license agreement prohibiting the sale of the patented lead-treated gasoline to unlicensed jobbers.

[fol. 138]

XVI

The court erred in enjoining, in Paragraph IV (5) of the decree, any license agreement by which the defendant corporation licenses or purports to license any jobber or other reseller to sell lead-treated gasoline.

XVII

The court erred in enjoining any attempt to require that such jobbers or other resellers procure a license in order to be able to buy, sell or otherwise deal in lead-treated gasoline.

XVIII

The court erred in disregarding in its decision and decree the unquestioned claims of the four patents owned by the defendant corporation, from which derive the rights and privileges, accorded by the patent law, to control the manufacture, sale, or use of the patented lead-treated gasoline and the patented method of using it in internal combustion engines.

XIX

The court erred in illegally limiting during the remaining life of the patents the manner and method whereby they may be utilized and in restricting the full pecuniary reward which the defendant corporation might obtain through their ownership.

XX

The court erred in failing to consider the defendant corporation's trademark rights derived from its ownership of lawful trademarks covering the sale of the patented lead-treated gasoline.

[fol. 139]

XXI

The court erred in issuing an injunction on the basic of speculative inferences from the stipulated facts.

Prayer for Reversal

For which errors the defendants, Ethyl Gasoline Corporation, Earle W. Webb, and John Coard Taylor pray that the said decree of the District Court of the United States for the Southern District of New York, entered August 14, 1939, in the above entitled cause, be reversed and the petition dismissed; that the amount of the cost bond to be given by appellants be fixed; that citation issued to the appellee named above; and for such other and further relief to which appellants may be entitled.

Respectfully submitted, Dean Acheson, Attorney for Appellants.

October 9, 1939.

[fol. 140] SUPREME COURT OF THE UNITED STATES

[Title omitted]

ORDER ALLOWING APPEAL

The appellants in the above entitled cause, and each of them, have prayed for the allowance of an appeal in this cause to the Supreme Court of the United States from the decree made and entered in the above entitled cause by the District Court of the United States for the Southern District of New York on the fourteenth day of August, 1939, and from each and every part thereof, and have presented and filed their petition for appeal, assignment of errors, prayer for reversal, and statement as to jurisdiction pursuant to the statutes of the United States and the rules of the Supreme Court of the United States in such case made and provided:

It Is Now Ordered That an appeal be and the same is hereby allowed to the Supreme Court of the United States from the District Court of the United States for the Southern District of New York in the above entitled cause as provided by law, and

It Is Further Ordered That the Clerk of the United States District Court for the Southern District of New York shall prepare and certify a transcript of the record, proceedings and decree in this cause and transmit the same [fol. 141] to the Supreme Court of the United States so that he shall have the same in said Court within forty days of this date, and

It Is Further Ordered That security for costs on appeal be fixed in the sum of $500.

Dated October 9th, 1939.

Wm. Bondy, United States District Judge for the Southern District of New York.

[fols. 142-143] Citation to usual form showing service on Wendell Berge omitted in printing.

[fol. 144] Bond on Appeal for $500.00 approved Oct. 9, 1939, omitted in printing.

[fol. 145] SUPREME COURT OF THE UNITED STATES

[Title omitted]

STIPULATION AS TO TRANSCRIPT OF RECORD

The parties to this cause, through their respective counsels, hereby stipulate that the portions of the record to be included in the transcript, to be prepared by the Clerk of the United States District Court for the Southern District of New York for transmission to the Clerk of the Supreme Court of the United States shall be as follows:

1. The Petition of the United States of America, filed February 19, 1937.

2. Answer of Defendants, filed June 5, 1937.

3. Stipulation dated April 22, 1938, together with two volumes of Exhibits thereto, numbered with reference to sections of the Stipulation.

4. Opinion of the Honorable William Bondy, United States District Judge, dated May 19, 1939.

5. Findings of Fact, and Conclusions of Law, entered August 14, 1939.

6. Final Decree, entered August 14, 1939, granting permanent injunction.

7. Stay order pending appeal entered August 14, 1939.

[fol. 146] 8. Petition for Appeal to the Supreme Court of the United States, Assignment of Errors, and Prayer for Reversal.

9. Statement as to Jurisdiction on Appeal.

10. Order of the Honorable William Bondy, Judge of the District Court of the United States for the Southern District of New York, allowing appeal to the Supreme Court of the United States.

11. Citation and acknowledgment of service thereof.

12. Statement required to be served on Appellee by Rule 12, Paragraph 2.

13. Bond for costs, together with approval of same.

14. Acknowledgment of service of Petition for Allowance of Appeal, with copy of Assignments of Errors and Order allowing Appeal, Statement as to Jurisdiction, and statement required by Rule 12, Paragraph 2.

15. This stipulation.

Dean Acheson, Attorney for Appellant. John Henry Lewin, Grant Kelleher, Attorneys for Appellee.

[fol. 147] SUPREME COURT OF THE UNITED STATES

[Title omitted]

STIPULATION AS TO RECORD

The parties to the above-entitled cause, by their respective counsel, hereby stipulate and agree that the attached bound volume containing

A printed copy of the Petition, consisting of 46 printed pages.

A mimeographed copy of the Answer, consisting of 11 pages.

A printed copy of the Stipulation, consisting of 37 pages.

A carbon copy of the Opinion, consisting of 27 pages.

A typewritten copy of the Findings of Fact and Conclusions of Law, consisting of 5 pages.

A typewritten copy of the Final Decree, consisting of 3 pages.

A typewritten copy of the Stay Order, consisting of 1 page.

A carbon copy of the Petition for Appeal, Assignment of Errors, and Prayer for Reversal, consisting of 6 pages.

A carbon copy of the Statement as to Jurisdiction, consisting of a cover and 8 pages, to which is appended a carbon copy of the Opinion, consisting of 11 pages.

A carbon copy of the Order Allowing Appeal, consisting of 2 pages.

A carbon copy of the Citation and acknowledgment of service thereof, consisting of 2 pages.

[fol. 148] A carbon copy of the Statement Required by Rule 12 Paragraph 2, consisting of 1 page.

A carbon copy of the bond on appeal and approval thereof, consisting of 1 page.

A carbon copy of acknowledgment of service of the Petition for Appeal, Assignment of Errors, and Prayer for Reversal; Statement as to Jurisdiction; Order allowing appeal to Supreme Court of the United States, dated October 9th, 1939; Citation dated October 9th, 1939; Statement directing attention to Paragraph 3 of Rule 12 of the Rules of the Supreme Court of the United States, consisting of 1 page.

A carbon copy of the Stipulation as to the portions of the record to be included in the transcript prepared by the Clerk of the District Court, consisting of 2 pages,

together with two bound volumes of exhibits, Volume 1 consisting of 170 pages of material and Volume II consisting of 24 pages of photostat material, constitutes a true and accurate copy of the portions of the record which the parties have heretofore stipulated should be included in the transcript to be prepared by the Clerk of the United States District Court for the Southern District of New York for transmission to the Clerk of the Supreme Court of the United States. The parties hereto, through their respective counsel, further stipulate and respectfully request that the Clerk certify the documents above specified to the Clerk of the said Supreme Court of the United States.

Dean Acheson, Attorney for Appellants, John Henry Lewin, Grant W. Kelleher, Attorneys for Appellee.

[fol. 149] In United States District Court

[Title omitted]

Stipulation as to Transcript of Record

It is hereby stipulated and agreed, that the foregoing is a true transcript of the record of the said District Court in the above entitled matter as agreed on by the parties.

Dated

Dean Acheson, Attorney for Appellants, John Henry Lewin, Grant W. Kelleher, Attorneys for Appellee.

[fol. 150] Clerk's Certificate to foregoing transcript omitted in printing.

[fols. 1-4] **Exhibits to Stipulation of Facts**

EXHIBIT 3-A

Feb. 23, 1926. 1,573,846

T. MIDGLEY, JR

METHOD AND MEANS FOR USING MOTOR FUELS

Filed April 15, 1922

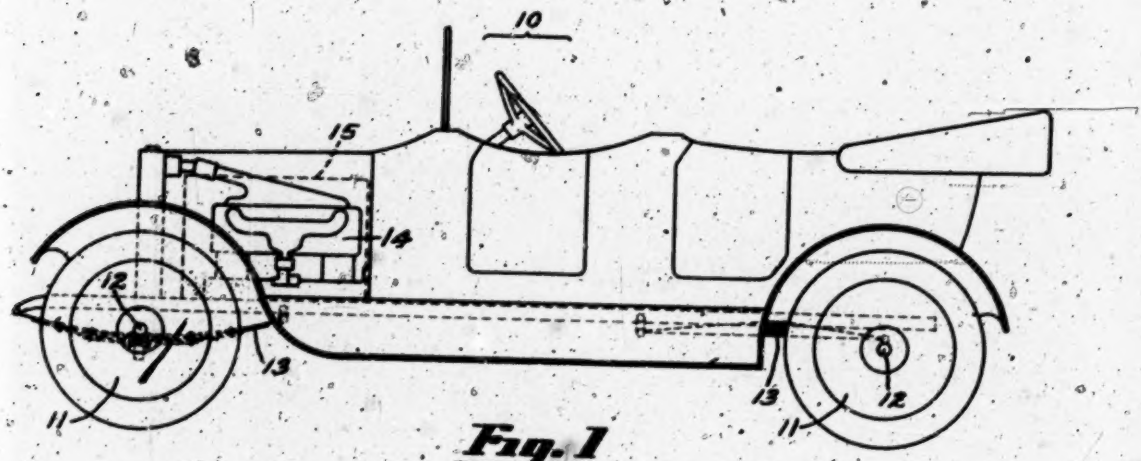

Fig. 1

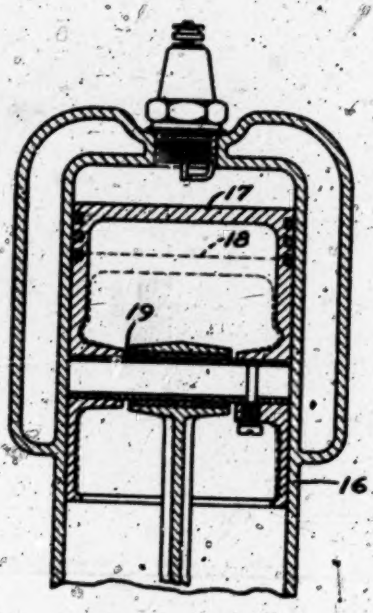

Fig. 2

Patented Feb. 23, 1926. 1,573,846

UNITED STATES PATENT OFFICE.

THOMAS MIDGLEY, JR., OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GENERAL MOTORS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE.

METHOD AND MEANS FOR USING MOTOR FUELS.

Application filed April 15, 1922. Serial No. 553,270.

To all whom it may concern:

Be it known that I, THOMAS MIDGLEY, JR., a citizen of the United States of America, residing at Dayton, county of Montgomery, and State of Ohio, have invented certain new and useful Improvements in Methods and Means for Using Motor Fuels, of which the following is a full, clear, and exact description.

This invention relates to fuels, such, for example as kerosene and gasoline, employed in the operation of internal-combustion engines and to the art of burning the fuels in an engine. The present tendency is to produce lower grades of gasoline in order to obtain a sufficient output for the increasing demand for motor fuels and to reduce the compressions of the engines so that these lower grades of fuel may be used without knocking. As the lowering of engine compression reduces the efficiency of the engine, a still greater output of fuel is required to meet the increase in fuel required to operate larger and less efficient engines. The principal objects of the present invention are to overcome these difficulties and to provide a means for using either low or high grades of motor fuel more efficiently and so reduce the quantity of fuel used.

The present application is a continuation in part of my application Serial No. 464,985, filed April 27, 1921.

In the accompanying drawings:

Fig. 1 is a side view of an automobile having an engine embodying the present invention and showing the comparative sizes of engines employed when using high and low engine compressions; and

Fig. 2 is a longitudinal sectional view of

duced, the engine heats rapidly, the efficiency of the engine is reduced and, if the initial pressure is very high, engine parts may be injured. The highest pressure at which a mixture may be burned in a cylinder without producing a fuel knock varies with the different fuels and, to some extent, with the temperature, position of spark plugs and other conditions within the engine. This pressure I term the "critical compression pressure" of the fuel.

The average critical compression pressure of kerosene is about 50 pounds, of the proper grades of gasoline about 75 pounds and of the better grades of gasoline about 125 pounds. The latter grade of gasoline is produced in limited quantities and is not available universally to the consumer. The commoner grades of fuel, such as kerosene and gasoline, having critical compression pressures below 75 pounds are used generally, and in internal-combustion engines for house lighting systems, trucks, tractors, and automobiles are designed to operate on these kinds of fuel.

I have found that the critical compression pressure of a fuel of the type mentioned above is increased by incorporating therewith any one of a large number of compounds containing metallic elements, i. e., compounded metallic elements.

By way of example, I may use a fuel consisting by volume of ¼ of one percent of tetra ethyl lead and 99¾ percent of gasoline having a normal "critical compression pressure" of about 75 pounds. The tetra ethyl lead dissolves in the gasoline forming a fuel having a "critical compression pressure" of about 160 pounds. The presence

Filed April 15, 1922

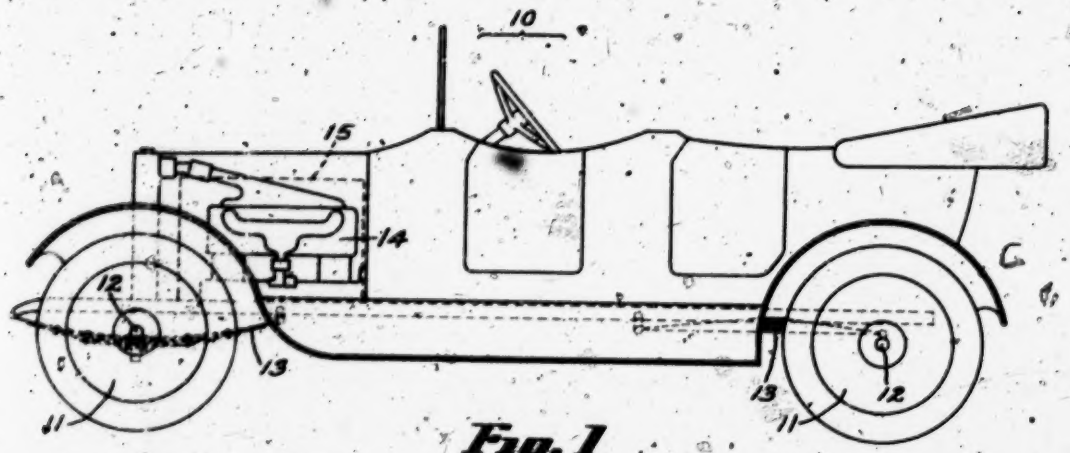

Fig. 1

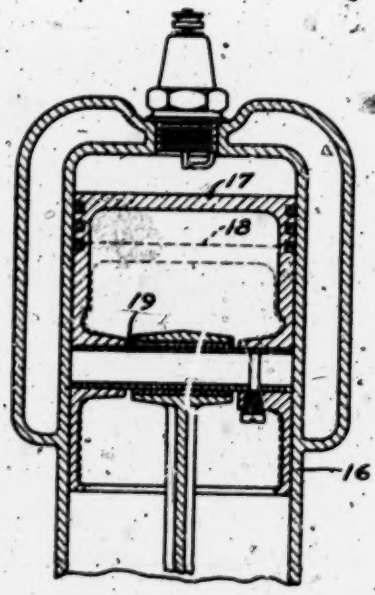

Fig. 2

Witnesses
Irvin A. Greenwald
Lloyd M. Keighley

Inventor
Thomas Midgley Jr.

By Francis D. Hardesty
Attorney

UNITED STATES PATENT OFFICE.

THOMAS MIDGLEY, JR., OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GENERAL MOTORS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE.

METHOD AND MEANS FOR USING MOTOR FUELS.

Application filed April 15, 1922. Serial No. 553,270.

To all whom it may concern:

Be it known that I, THOMAS MIDGLEY, Jr., a citizen of the United States of America, residing at Dayton, county of Montgomery, and State of Ohio, have invented certain new and useful Improvements in Methods and Means for Using Motor Fuels, of which the following is a full, clear, and exact description.

This invention relates to fuels, such, for example as kerosene and gasoline, employed in the operation of internal-combustion engines and to the art of burning the fuels in an engine. The present tendency is to produce lower grades of gasoline in order to obtain a sufficient output for the increasing demand for motor fuels and to reduce the compressions of the engines so that these lower grades of fuel may be used without knocking. As the lowering of engine compression reduces the efficiency of the engine, a still greater output of fuel is required to meet the increase in fuel required to operate larger and less efficient engines. The principal objects of the present invention are to overcome these difficulties and to provide a means for using either low or high grades of motor fuel more efficiently and so reduce the quantity of fuel used.

The present application is a continuation in part of my application Serial No 464,985, filed April 27, 1921.

In the accompanying drawings:

Fig. 1 is a side view of an automobile having an engine embodying the present invention and showing the comparative sizes of engines employed when using high and low engine compressions; and

Fig. 2 is a longitudinal sectional view of an engine cylinder and shows the comparative sizes of combustion chambers employed when using fuels having high and low critical compression pressures.

Kerosene, gasoline and the heavier hydrocarbons have the characteristic that, when a combustible gaseous mixture containing one of these fuels and air is burned in an internal-combustion engine while subjected to a relatively high pressure, a fuel knock is produced, the engine heats rapidly, the efficiency of the engine is reduced and, if the initial pressure is very high, engine parts may be injured. The highest pressure at which a mixture may be burned in a cylinder without producing a fuel knock varies with the different fuels and, to some extent, with the temperature, position of spark plugs and other conditions within the engine. This pressure I term the "critical compression pressure" of the fuel.

The average critical compression pressure of kerosene is about 50 pounds, of the proper grades of gasoline about 75 pounds and of the better grades of gasoline about 125 pounds. The latter grade of gasoline is produced in limited quantities and is not available universally to the consumer. The commoner grades of fuel, such as kerosene and gasoline, having critical compression pressures below 75 pounds are used generally, and in internal-combustion engines for house lighting systems, trucks, tractors, and automobiles are designed to operate on these kinds of fuel.

I have found that the critical compression pressure of a fuel of the type mentioned above is increased by incorporating therewith any one of a large number of compounds containing metallic elements, i. e., compounded metallic elements.

By way of example, I may use a fuel consisting by volume of ¼ of one percent of tetra ethyl lead and 99¾ percent of gasoline having a normal "critical compression pressure" of about 75 pounds. The tetra ethyl lead dissolves in the gasoline forming a fuel having a "critical compression pressure" of about 160 pounds. The presence of the lead compound changes the gasoline from a low compression fuel to a higher compression fuel, i. e., increases its "critical compression pressure." This gasoline may be used in an engine having a compression pressure of about 160 pounds, with a smaller fuel consumption for obtaining a given amount of work than is required to operate an engine having a compression pressure of 75 pounds on the untreated gas-

oline. Experiments with automobiles have shown that if the engine compression is increased to 160 pounds, a treated fuel being used to run the engine and the gear ratio between the engine and the rear axle is reduced, the mileage obtained from a gallon of gasoline is substantially twice that obtained when running the engine at 75 pounds compression on the untreated or low compression fuel.

In the drawings, 10 is an automobile having wheels 11, axles 12, springs 13, and an engine 14 whose compression pressure is about 160 pounds. This engine may be operated on the mixture of gasoline and tetra ethyl lead just described. At 15 is shown diagrammatically the comparative size of an engine operating on an engine compression of about 75 pounds and capable of delivering the same horse power as engine 14. It is apparent that by employing engine 14 instead of engine 15, the size and weight of the wheels, axles and other parts of the automobile may be materially lightened, and that by lightening the weight of the machine as a whole a still smaller engine may be employed to propel the vehicle.

Fig. 2 illustrates a method of changing the compression of an engine to obtain these results. In this figure, 16 is an engine cylinder and 17 the engine piston in its top dead center position in which the gaseous mixture is compressed to about 160 pounds. The dotted line 18 indicates the top dead center position of a piston which compresses the gases to about 75 pounds. A change from a low compression engine to a high compression engine may be made by substituting a piston whose length from the wrist pin 19 to the top of the piston is greater than in pistons in common use. This change in the pistons increases the horse power of the engine. Experience has shown that operation of an engine of the type illustrated in solid lines in Fig. 2, on a low compression fuel such as common gasoline, gives excessive heating, violent knocking, and under continued operation cracks the piston.

For some commercial purposes it will probably be sufficient to use but one part of tetra ethyl lead in 2000 parts of gasoline. This mixture may be used in a truck motor to avoid the knock generally produced when climbing hills at low speed with open throttle. Relatively small proportional quanti-

pression pressure. The fuels used include gasoline and other hydrocarbon fuels containing hydrocarbons which may be obtained from an asphalt, naphthene paraffine base crude or mixtures thereof.

Other lead compounds which have been used successfully are the phenyl compounds and other alkyl compounds besides the tetra ethyl lead. These include the ethyl, isopropyl and methyl compounds. Methods of manufacturing lead compounds are described on page 133 et. seq., vol. 111 of Watts' Dictionary of Chemistry as revised by Morley and Muir and published by Longmans, Green and Co., London, England.

Other metallic compounds may be used to suppress a knock in a motor. These include compounds of selenium, tellurium, tin, arsenic and antimony. The phenyl and alkyl compounds of these metals have been successfully used where the stable compounds are obtainable. The alkyl metal compounds usually have a greater knock suppressing value than the corresponding phenyl compounds.

Dissolving a knock suppressing substance in a hydrocarbon fuel has been found the most satisfactory method of changing the critical compression pressure of the fuel, and for this reason the organic compounds have been employed to a greater extent than other compounds in suppressing knocks, however, I do not limit my invention to organic compounds nor to the oil soluble compounds.

The value of metallic compounds in changing the critical compression pressure depends upon the metal used, the composition of the compound, its stability and volatility. Up to the point of complete vaporization the anti-knock value depends in part on the percentage of the compound vaporized under engine condtions. Where the nature of the compound changes before ignition of the fuel, combustion of the fuel takes place in the presence of the new compound and the anti-knock value depends on the nature of the new compound instead of the compound added to the fuel.

If a radical is attached to the metal in the compound in such a manner that the resulting compound is oil soluble and volatile, a high anti-knock value for that metal is obtained. As the compound departs from these conditions either in the kind of radical employed or the number of radicals of a

less soluble in the fuel than the tetra ethyl lead. The tri-ethyl lead hydroxide is almost as powerful a knock suppresser as the tetra ethyl lead.

The value of a compounded metallic element as a knock suppresser appears also to be a period function of the atomic number and, in general, with similar elements increases with increasing atomic weight. To illustrate this function, I take the ethyl compounds of the metals in the right hand column of the 4th, 5th, and 6th groups, wherever stable ethyl compounds are obtainable. As the ethyl compound of antimony is unstable in the air at room temperature, I employ the phenyl compound of antimony. These compounds increase in knock suppressing value in group 4 in the order tin, lead; in group 5 in the order arsenic, antimony; and in group 6 in the order selenium, tellurium. Taking group 4 as an example, 1% by volume of the ethyl compounds of the metals in gasoline or kerosene give the following increases in critical compression pressure: tin, 15 pounds; lead at the rate of 340 pounds when employed in relatively small quantities.

While I have mentioned more particularly the use of phenyl and alkyl compounds of certain metals for increasing the critical compression pressure of kerosene and gasoline, my invention is not limited wholly to the use of these compounds, nor to compounds of these metals, and the compounded metallic elements may be employed with the heavier hydrocarbon or other fuels.

Further, while the specific examples herein given constitute preferred forms of embodiment of the invention, it is to be understood that other forms might be adopted, without departing from the scope of the claims which follow.

What I claim is as follows:

1. A fuel for internal combustion engines comprising a low compression motor fuel, and a volatile compound of a metal adapted to increase the critical compression pressure of the motor fuel.

2. A fuel for internal combustion engines comprising a low compression motor fuel, and an oil soluble volatile compound of a metal adapted to increase the critical compression pressure of the motor fuel.

3. A fuel for internal combustion engines comprising a low compression motor fuel, and a relatively small amount of compound consisting of a metal bound to a hydrocarbon radical.

4. A fuel for internal combustion engines comprising a low compression motor fuel, and a relatively small amount of oil soluble compound consisting of a metal bound to a hydrocarbon radical.

6. A fuel for internal combustion engines comprising a low compression motor fuel, and a relatively small amount of a volatile and oil soluble compound consisting of a metal bound to a hydrocarbon radical.

7. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of an alkyl compound of a metal containing more than two alkyl groups.

8. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of an oil soluble compound of a metal containing more than two alkyl groups.

9. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of a volatile compound of a metal containing more than two alkyl groups.

10. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of a volatile and oil soluble compound of a metal containing more than two alkyl groups.

11. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of an alkyl compound of a metal containing more than three alkyl groups.

12. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of an oil soluble compound of a metal containing more than three alkyl groups.

13. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of a volatile compound of a metal containing more than three alkyl groups.

14. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of a volatile and oil soluble compound of a metal containing more than three alkyl groups.

15. A fuel for internal combustion engines comprising kerosene or gasoline; and a volatile alkyl compound of a metallic element homogeneously incorporated therein.

16. A fuel for internal combustion engines comprising a low compression motor fuel; and a volatile ethyl compound of a metallic element homogeneously incorporated therein and adapted to be vaporized in an internal-combustion engine before combustion of the

between the engine and the rear axle is reduced, the mileage obtained from a gallon of gasoline is substantially twice that obtained when running the engine at 75 pounds compression on the untreated or low compression fuel.

In the drawings, 10 is an automobile having wheels 11, axles 12, springs 13, and an engine 14 whose compression pressure is about 160 pounds. This engine may be operated on the mixture of gasoline and tetra ethyl lead just described. At 15 is shown diagrammatically the comparative size of an engine operating on an engine compression of about 75 pounds and capable of delivering the same horse power as engine 14. It is apparent that by employing engine 14 instead of engine 15, the size and weight of the wheels, axles and other parts of the automobile may be materially lightened, and that by lightening the weight of the machine as a whole a still smaller engine may be employed to propel the vehicle.

Fig. 2 illustrates a method of changing the compression of an engine to obtain these results. In this figure, 16 is an engine cylinder and 17 the engine piston in its top dead center position in which the gaseous mixture is compressed to about 160 pounds. The dotted line 18 indicates the top dead center position of a piston which compresses the gases to about 75 pounds. A change from a low compression engine to a high compression engine may be made by substituting a piston whose length from the wrist pin 19 to the top of the piston is greater than in pistons in common use. This change in the pistons increases the horse power of the engine. Experience has shown that operation of an engine of the type illustrated in solid lines in Fig. 2, on a low compression fuel such as common gasoline, gives excessive heating, violent knocking, and under continued operation cracks the piston.

For some commercial purposes it will probably be sufficient to use but one part of tetra ethyl lead in 2000 parts of gasoline. This mixture may be used in a truck motor to avoid the knock generally produced when climbing hills at low speed with open throttle. Relatively small proportional quantities of the lead compound are required to increase the critical compression pressure of "aviation" gasoline from 125 pounds to 160 pounds or more.

The fuel mixture or combination may also be varied by using other fuels as the fuel base or major constituent of the high compression fuel and using other compounded metallic elements to increase critical compression. Such fuels may be benzol, toluol, alcohol, acetone, ether, or crude or mixtures thereof.

Other lead compounds which have been used successfully are the phenyl compounds and other alkyl compounds besides the tetra ethyl lead. These include the ethyl, isopropyl and methyl compounds. Methods of manufacturing lead compounds are described on page 133 et. seq., vol. 111 of Watts' Dictionary of Chemistry as revised by Morley and Muir and published by Longmans, Green and Co., London, England.

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Dissolving a knock suppressing substance in a hydrocarbon fuel has been found the most satisfactory method of changing the critical compression pressure of the fuel, and for this reason the organic compounds have been employed to a greater extent than other compounds in suppressing knocks, however, I do not limit my invention to organic compounds nor to the oil soluble compounds.

The value of metallic compounds in changing the critical compression pressure depends upon the metal used, the composition of the compound, its stability and volatility. Up to the point of complete vaporization the anti-knock value depends in part on the percentage of the compound vaporized under engine condtions. Where the nature of the compound changes before ignition of the fuel, combustion of the fuel takes place in the presence of the new compound and the anti-knock value depends on the nature of the new compound instead of the compound added to the fuel.

If a radical is attached to the metal in the compound in such a manner that the resulting compound is oil soluble and volatile, a high anti-knock value for that metal is obtained. As the compound departs from these conditions either in the kind of radical employed or the number of radicals of a certain kind in the compound, the anti-knock value will generally be reduced. Examples of compounds in which the anti-knock value, as based on these conditions, becomes negligible are lead oleate and lead acetate. If, in the formula for tetra-ethyl lead, an OH radical is substituted for an ethyl radical, the resulting compound (triethyl lead hydroxide) is less volatile and

be a period function of the atomic number and, in general, with similar elements increases with increasing atomic weight. To illustrate this function, I take the ethyl compounds of the metals in the right hand column of the 4th, 5th, and 6th groups, wherever stable ethyl compounds are obtainable. As the ethyl compound of antimony is unstable in the air at room temperature, I employ the phenyl compound of antimony. These compounds increase in knock suppressing value in group 4 in the order tin, lead; in group 5 in the order arsenic, antimony; and in group 6 in the order selenium, tellurium. Taking group 4 as an example, 1% by volume of the ethyl compounds of the metals in gasoline or kerosene give the following increases in critical compression pressure: tin, 15 pounds: lead at the rate of 340 pounds when employed in relatively small quantities.

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Further, while the specific examples herein given constitute preferred forms of embodiment of the invention, it is to be understood that other forms might be adopted, without departing from the scope of the claims which follow.

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2. A fuel for internal combustion engines comprising a low compression motor fuel, and an oil soluble volatile compound of a metal adapted to increase the critical compression pressure of the motor fuel.

3. A fuel for internal combustion engines comprising a low compression motor fuel, and a relatively small amount of compound consisting of a metal bound to a hydrocarbon radical.

4. A fuel for internal combustion engines comprising a low compression motor fuel, and a relatively small amount of a volatile compound consisting of a metal bound to a hydrocarbon radical.

5. A fuel for internal combustion engines comprising a low compression motor fuel, and oil soluble compound consisting of a metal bound to a hydrocarbon radical.

7. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of an alkyl compound of a metal containing more than two alkyl groups.

8. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of an oil soluble compound of a metal containing more than two alkyl groups.

9. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of a volatile compound of a metal containing more than two alkyl groups.

10. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of a volatile and oil soluble compound of a metal containing more than two alkyl groups.

11. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of an alkyl compound of a metal containing more than three alkyl groups.

12. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of an oil soluble compound of a metal containing more than three alkyl groups.

13. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of a volatile compound of a metal containing more than three alkyl groups.

14. A fuel for internal combustion engines comprising a hydrocarbon motor fuel containing a relatively small proportion of a volatile and oil soluble compound of a metal containing more than three alkyl groups.

15. A fuel for internal combustion engines comprising kerosene or gasoline; and a volatile alkyl compound of a metallic element homogeneously incorporated therein.

16. A fuel for internal combustion engines comprising a low compression motor fuel; and a volatile ethyl compound of a metallic element homogeneously incorporated therein and adapted to be vaporized in an internal-combustion engine before combustion of the fuel therein.

17. A fuel for internal combustion engines comprising a low compression motor fuel; and an alkyl compound of a metal in the right hand column of a group between the third and seventh groups of Mendeleef's table.

18. A fuel for internal combustion engines comprising a low compression motor fuel; and a volatile lead compound homogeneously incorporated therein.

19. A fuel for internal combustion engines comprising a low compression motor fuel; and an alkyl compound of lead.

20. A fuel for internal combustion engines comprising kerosene or gasoline; and an ethyl compound of lead.

21. A fuel for internal combustion engines comprising gasoline; and tetraethyl lead.

In testimony whereof I hereto affix my signature.

THOMAS MIDGLEY, JR.

Certificate of Correction.

It is hereby certified that in Letters Patent No. 1,573,846, granted February 23, 1926, upon the application of Thomas Midgley, Jr., of Dayton, Ohio, for an improvement in "Methods and Means for Using Motor Fuels," an error appears in the printed specification requiring correction as follows: Page 1, line 62, for the word "proper" read *poorer;* and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 22d day of June, A. D. 1926.

[SEAL.]

M. J. MOORE,
Acting Commissioner of Patents.

[fols. 5-6] EXHIBIT 3

Patented July 20, 1926. 1,592,954

UNITED STATES PATENT OFFICE.

THOMAS MIDGLEY, JR., OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GENERAL MOTORS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE.

FUEL.

No Drawing. Application filed May 19, 1923. Serial No. 640,274.

This invention relates to the use of lead alkyl and aryl compounds in hydrocarbon motor fuels such, for example, as kerosene and gasoline, to increase the critical compression pressure of the fuel and avoid a fuel knock in an internal-combustion engine operating at compressions above the normal critical compression pressure of the fuel. The principal object of the invention is to form with the fuel and a hydrocarbon compound of lead, a combination which burns in the engine and yields a lead compound having a relatively low fluxing action as contrasted particularly with lead oxide. Fuel knock is a function of the fuel employed and the compression pressure used as contrasted with a mechanical knock, and the term "antiknock substance" as employed herein designates a compound which, when present in the combustion chamber in relatively small quantities at the time of combustion, inhibits the fuel knock.

This combination may be effected by employing with a tetra ethyl, tetra phenyl, tetra methyl, tetra amyl, or other similar compound of lead in the fuel, a chlorine compound such, for example, as carbon tetra chloride or an alkyl chloride such as amyl chloride, hexyl chloride or ethyl chloride, which supplies chlorine which combines with the lead during combustion to form a lead-chloride compound. The corresponding iodide and bromide compounds may be employed in place of the chloride compounds. A preferred method of carrying out my invention in forming this class of combination is to use a mixture (by weight) of 2 parts of carbon tetra chloride and 3 parts of lead tetra ethyl or lead tetra methyl, etc. This mixture is added to the fuel in the storage tank of a filling station or the fuel tank of a car and fed with the fuel into the combustion chamber of an engine and burned therein. One of the products of combustion is a lead halide such as, in the specific example given above, lead chloride.

Another method of carrying out my invention is to use a mixture of lead alkyl and aryl compounds with lead and a halogen; lead triethyl chloride, lead triethyl bromide and the corresponding alkyl and aryl compounds with lead and a halogen such as chlorine, iodine, or bromine.

Methods of manufacturing lead compounds are described on page 133 et. seq., Vol. III of Watts' Dictionary of Chemistry as revised by Morley and Muir and published by Longmans, Green and Co., London, England.

In these fuels, the lead and the hydrocarbon combined therewith, form the base of the anti-knock substance which suppresses a fuel knock in a mixture formed in part by a low compression fuel such as gasoline or kerosene and the complete compound or mixture is formed about this base. The term chemical is employed in the claims to designate an element or combination of elements present either in chemical combination with the lead or in a material not in chemical combination with the lead, the chemical being adapted to form with the lead a substantially non-fluxing compound during combustion of the fuel. It has been found that these substances form practically nonfluxing compounds when burned.

The alkyl dihalide compounds of lead and the trialkyl monohalide compounds of lead are generally less soluble in kerosene and gasoline than the tetra alkyl compounds. Benzol and an alcohol miscible in all proportions with paraffin hydrocarbons, or mixtures thereof, may be employed to assist in blending these anti-knock compounds with the fuel. The percentage of these blending agents employed with the small amount of anti-knock compound to be added to the fuel, is generally not over 1% of the total gasoline for the trialkyl monohalide compounds and not over 5% of the total gasoline for the dialkyl dihalide compounds. These proportions of the blending agents may be used for the corresponding phenyl compounds.

I claim:

comprising a low compression motor fuel; nature.
and an alkyl compound of lead.

20. A fuel for internal combustion engines

THOMAS MIDGLEY, Jr.

Certificate of Correction.

It is hereby certified that in Letters Patent No. 1,573,846, granted February 23, 1926, upon the application of Thomas Midgley, Jr., of Dayton, Ohio, for an improvement in "Methods and Means for Using Motor Fuels," an error appears in the printed specification requiring correction as follows: Page 1, line 62, for the word "proper" read *poorer;* and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 22d day of June, A. D. 1926.

[SEAL.]

M. J. MOORE,
Acting Commissioner of Patents.

GENERAL MOTORS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE.

FUEL.

No Drawing. Application filed May 19, 1923. Serial No. 640,274.

This invention relates to the use of lead alkyl and aryl compounds in hydrocarbon motor fuels such, for example, as kerosene and gasoline, to increase the critical compression pressure of the fuel and avoid a fuel knock in an internal-combustion engine operating at compressions above the normal critical compression pressure of the fuel. The principal object of the invention is to form with the fuel and a hydrocarbon compound of lead, a combination which burns in the engine and yields a lead compound having a relatively low fluxing action as contrasted particularly with lead oxide. Fuel knock is a function of the fuel employed and the compression pressure used as contrasted with a mechanical knock, and the term "antiknock substance" as employed herein designates a compound which, when present in the combustion chamber in relatively small quantities at the time of combustion, inhibits the fuel knock.

This combination may be effected by employing with a tetra ethyl, tetra phenyl, tetra methyl, tetra amyl, or other similar compound of lead in the fuel, a chlorine compound such, for example, as carbon tetra chloride or an alkyl chloride such as amyl chloride, hexyl chloride or ethyl chloride, which supplies chlorine which combines with the lead during combustion to form a lead-chloride compound. The corresponding iodide and bromide compounds may be employed in place of the chloride compounds. A preferred method of carrying out my invention in forming this class of combination is to use a mixture (by weight) of 2 parts of carbon tetra chloride and 3 parts of lead tetra ethyl or lead tetra methyl, etc. This mixture is added to the fuel in the storage tank of a filling station or the fuel tank of a car and fed with the fuel into the combustion chamber of an engine and burned therein. One of the products of combustion is a lead halide such as, in the specific example given above, lead chloride.

Another method of carrying out my invention is to form a lead alkyl or aryl chemical combination with the substance which unites with the lead during combustion to form a lead compound other than lead oxide. Examples of such compounds are lead diphenyl dibromide, lead diphenyl diiodide, lead diphenyl dichloride, and the corresponding ethyl, methyl, and other alkyl and aryl compounds with lead and a halogen; lead triethyl chloride, lead triethyl bromide and the corresponding alkyl and aryl compounds with lead and a halogen such as chlorine, iodine, or bromine.

Methods of manufacturing lead compounds are described on page 133 et. seq., Vol. III of Watts' Dictionary of Chemistry as revised by Morley and Muir and published by Longmans, Green and Co., London, England.

In these fuels, the lead and the hydrocarbon combined therewith, form the base of the anti-knock substance which suppresses a fuel knock in a mixture formed in part by a low compression fuel such as gasoline or kerosene and the complete compound or mixture is formed about this base. The term chemical is employed in the claims to designate an element or combination of elements present either in chemical combination with the lead or in a material not in chemical combination with the lead, the chemical being adapted to form with the lead a substantially non-fluxing compound during combustion of the fuel. It has been found that these substances form practically nonfluxing compounds when burned.

The alkyl dihalide compounds of lead and the trialkyl monohalide compounds of lead are generally less soluble in kerosene and gasoline than the tetra alkyl compounds. Benzol and an alcohol miscible in all proportions with paraffin hydrocarbons, or mixtures thereof, may be employed to assist in blending these anti-knock compounds with the fuel. The percentage of these blending agents employed with the small amount of anti-knock compound to be added to the fuel, is generally not over 1% of the total gasoline for the trialkyl monohalide compounds and not over 5% of the total gasoline for the dialkyl dihalide compounds. These proportions of the blending agents may be used for the corresponding phenyl compounds.

I claim:

1. A homogeneous composition of matter comprising a motor fuel, and an anti-knock substance for said motor fuel having a lead content and a chemical adapted to combine with the lead during combustion of the fuel to form a lead compound having a lower fluxing action than lead oxide.

2. A homogeneous composition of matter

comprising a motor fuel, and an anti-knock substance for said motor fuel having as a base a hydrocarbon compound of lead and a chemical adapted to combine with the lead during combustion of the fuel to form a relatively nonfluxing lead compound.

3. A homogeneous composition of matter comprising gasoline, and an anti-knock substance for said motor fuel formed on a lead alkyl base and having a chemical adapted to combine with the lead during burning in an engine to form a lead compound having a lower fluxing action than lead oxide.

4. A composition of matter comprising a motor fuel; and an anti-knock substance for said motor fuel having as a base a lead compound and containing a halogen.

5. A composition of matter comprising a hydrocarbon fuel, a hydrocarbon compound of lead, and a halide.

6. A composition of matter comprising a hydrocarbon fuel, an alkyl compound of lead, and a halide.

7. A composition of matter comprising gasoline, an alkyl compound of lead, and a chloride.

8. A composition of matter comprising gasoline, lead tetra ethyl, and carbon tetra chloride.

9. A composition of matter comprising a lead alkyl compound, and a halide.

10. A composition of matter comprising a lead alkyl compound, and a chloride.

11. A composition of matter comprising a lead alkyl compound, and carbon tetra chloride.

12. A composition of matter comprising lead tetra ethyl, and carbon tetra chloride.

In testimony whereof I hereto affix my signature.

THOMAS MIDGLEY, Jr.

Patented May 1, 1928. 1,668,022

UNITED STATES PATENT OFFICE.

THOMAS MIDGLEY, JR., OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GENERAL MOTORS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE.

MOTOR FUEL.

No Drawing. Application filed January 6, 1925. Serial No. 916.

This invention relates to a motor fuel, and to the burning of fuel mixtures in an internal combustion engine in the presence of substances added to a fuel or fuel mixture, including a compound of a metal, and, more particularly, a compound such as lead tetra ethyl, which decreases fuel knock. The present application is a continuation in part of my Patent No. 1,592,954 issued July 20, 1926, disclosing the use of halide compounds with a motor fuel, and lead tetra ethyl.

The object of the present invention is to prevent the formation of a deposit on engine parts and especially valve stems, resulting from the use of such compounds with the fuel in the combustion chamber of a motor.

By way of an example, I may form a knock suppressing composition by mixing, by volume, 40 parts of lead tetra ethyl, 13 parts of ethylene dibromide, 7 parts of monochlorinated naphthalene, and 5 parts of propylene dibromide. 4 cc. of this composition is added to a gallon of kerosene or gasoline, a fuel-air mixture is formed and the mixture is burned in an internal combustion engine. The composition vaporizes in the engine cylinder, and the gasoline or kerosene is burned in the presence of these vapors. One of the products of combustion is lead bromide. The ethylene dibromide and propylene dibromide are the source for the bromine which combines with the lead and so reduces the formation of lead oxide which fluxes more readily with engine parts such as spark plug points. Either the chlorinated naphthalene or the bromide compound may be omitted but the use of both is preferred.

Kerosene and gasoline are named merely as common examples of low compression fuels which give a fuel knock when a gaseous mixture containing the fuel is burned under relatively high compression. The composition given reduces the fuel knock.

The composition may be varied by changing the proportions of the ingredients given in the example, or substituting other halide compounds for the halide compounds given. Apparently these compounds give lubrication and protection to valve stems.

A mixture of ethylene dibromide and propylene dibromide is preferred in cold weather because of its low freezing point. I may use in the fuel either of these or ethylene chlorobromide, butylene chlorobromide, amylene chlorobromide, tribromaniline, ethyl bromide, or other bromide compounds. While the bromide compounds are now preferred to the chlorine compounds, I may use ethylene dichloride, propyline dichloride, or butylene dichloride, trichloraniline or other chloride compounds. The quantity of each of these used depends on the amount of their halide content. Since the bromide compounds are, generally, more effective than the chloride compounds, the quantity of bromides used may be smaller than the chlorides.

The lubricant, such as a halogenated aromatic compound, has been found effective with compounds of other metals, such, for example, as arsenic, tin, nickel, iron, zinc, and many others. The hydrocarbon compounds of the metals such as the alkyl compounds, and the carbonyl compounds such as nickel carbonyl and iron carbonyl are preferred. Other metal compounds are titanium tetrachloride, and tin tetra-chloride.

For commercial purposes a composition which is a single phase or homogenous liquid and oil soluble is preferred. When substances such as tribromaniline and tribromphenol are used, separate phases of the composition result but are all soluble in the gasoline. In such a case I may employ multi-stage mixing with the gasoline or other fuel. If desired, blending agents, such as benzol, may be used.

I have found that motor compounds which become volatile under engine conditions are best adapted to reduce fuel knock.

What I claim is:

1. A motor fuel comprising a hydrocar-

relatively nonfluxing lead compound.

3. A homogeneous composition of matter comprising gasoline, and an anti-knock substance for said motor fuel formed on a lead alkyl base and having a chemical adapted to combine with the lead during burning in an engine to form a lead compound having a lower fluxing action than lead oxide.

4. A composition of matter comprising a motor fuel; and an anti-knock substance for said motor fuel having as a base a lead compound and containing a halogen.

5. A composition of matter comprising a hydrocarbon fuel, a hydrocarbon compound of lead, and a halide.

6. A composition of matter comprising a

8. A composition of matter comprising gasoline, lead tetra ethyl, and carbon tetra chloride.

9. A composition of matter comprising a lead alkyl compound, and a halide.

10. A composition of matter comprising a lead alkyl compound, and a chloride.

11. A composition of matter comprising a lead alkyl compound, and carbon tetra chloride.

12. A composition of matter comprising lead tetra ethyl, and carbon tetra chloride.

In testimony whereof I hereto affix my signature.

THOMAS MIDGLEY, JR.

THOMAS MIDGLEY, JR., OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GENERAL MOTORS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE.

MOTOR FUEL.

No Drawing. Application filed January 6, 1925. Serial No. 916.

This invention relates to a motor fuel, and to the burning of fuel mixtures in an internal combustion engine in the presence of substances added to a fuel or fuel mixture, including a compound of a metal, and, more particularly, a compound such as lead tetra ethyl, which decreases fuel knock. The present application is a continuation in part of my Patent No. 1,592,954 issued July 20, 1926, disclosing the use of halide compounds with a motor fuel, and lead tetra ethyl.

The object of the present invention is to prevent the formation of a deposit on engine parts and especially valve stems, resulting from the use of such compounds with the fuel in the combustion chamber of a motor.

By way of an example, I may form a knock suppressing composition by mixing, by volume, 40 parts of lead tetra ethyl, 13 parts of ethylene dibromide, 7 parts of mono-chlorinated naphthalene, and 5 parts of propylene dibromide. 4 cc. of this composition is added to a gallon of kerosene or gasoline, a fuel-air mixture is formed and the mixture is burned in an internal combustion engine. The composition vaporizes in the engine cylinder, and the gasoline or kerosene is burned in the presence of these vapors. One of the products of combustion is lead bromide. The ethylene dibromide and propylene dibromide are the source for the bromine which combines with the lead and so reduces the formation of lead oxide which fluxes more readily with engine parts such as spark plug points. Either the chlorinated naphthalene or the bromide compound may be omitted but the use of both is preferred.

Kerosene and gasoline are named merely as common examples of low compression fuels which give a fuel knock when a gaseous mixture containing the fuel is burned under relatively high compression. The composition given reduces the fuel knock.

The composition may be varied by changing the proportions and by using other chemical compounds. Other halogenated aromatic compounds such as brominated or chlorinated benzol, or brominated or chlorinated toluene or oils having similar physical characteristics including stability at relatively high temperatures may be used in place of mono-chlorinated naphthalene. Apparently these compounds give lubrication and protection to valve stems.

A mixture of ethylene dibromide and propylene dibromide is preferred in cold weather because of its low freezing point. I may use in the fuel either of these or ethylene chlorobromide, butylene chlorobromide, amylene chlorobromide, tribromaniline, ethyl bromide, or other bromide compounds. While the bromide compounds are now preferred to the chlorine compounds, I may use ethylene dichloride, propyline dichloride, or butylene dichloride, trichloraniline or other chloride compounds. The quantity of each of these used depends on the amount of their halide content. Since the bromide compounds are, generally, more effective than the chloride compounds, the quantity of bromides used may be smaller than the chlorides.

The lubricant, such as a halogenated aromatic compound, has been found effective with compounds of other metals, such, for example, as arsenic, tin, nickel, iron, zinc, and many others. The hydrocarbon compounds of the metals such as the alkyl compounds, and the carbonyl compounds such as nickel carbonyl and iron carbonyl are preferred. Other metal compounds are titanium tetrachloride, and tin tetra-chloride.

For commercial purposes a composition which is a single phase or homogenous liquid and oil soluble is preferred. When substances such as tribromaniline and tribromphenol are used, separate phases of the composition result but are all soluble in the gasoline. In such a case I may employ multi-stage mixing with the gasoline or other fuel. If desired, blending agents, such as benzol, may be used.

I have found that motor compounds which become volatile under engine conditions are best adapted to reduce fuel knock.

What I claim is:

1. A motor fuel comprising a hydrocarbon, a volatile compound of a metal, and a halogenated lubricating oil.

2. A motor fuel comprising a hydrocarbon, a volatile compound of a metal, a halogenated lubricating oil and a substance adapted to form on combustion, a non-fluxing compound with said metal.

3. A motor fuel comprising a hydrocar-

bon, a volatile compound of a metal and a halogenated oil.

4. A motor fuel comprising a hydrocarbon, a volatile compound of a metal and a chlorinated oil.

5. A motor fuel comprising a hydrocarbon, a volatile compound of a metal, and a lubricant.

6. A motor fuel comprising a hydrocarbon, a volatile compound of lead and a halogenated lubricating oil.

7. A motor fuel comprising a hydrocarbon, a volatile compound of lead and a halogenated oil.

8. A motor fuel comprising a hydrocarbon, a volatile compound of lead, and a chlorinated oil.

9. A motor fuel comprising a hydrocarbon, a volatile lead compound and a volatile bromide compound.

10. A motor fuel comprising a hydrocarbon, a hydrocarbon compound of lead, and a volatile bromide compound.

11. A motor fuel comprising a hydrocarbon, a lead alkyl compound, and a volatile bromide compound.

12. A motor fuel comprising a hydrocarbon, lead tetraethyl, and ethylene dibromide.

13. A motor fuel comprising a hydrocarbon, a volatile lead compound, a volatile halide compound, and a lubricant.

14. A motor fuel comprising a hydrocarbon, a volatile lead compound, a volatile bromide compound, and a lubricant.

15. A motor fuel comprising a hydrocarbon, a lead alkyl compound, a volatile bromide compound and a halogenated oil.

16. A motor fuel comprising a hydrocarbon, lead tetra ethyl, ethylene dibromide, and mono-chlorinated naphthalene.

17. A composition of matter comprising a volatile compound of a metal, and a halogenated lubricating oil.

18. A composition of matter comprising a volatile metal compound and a halogenated oil.

19. A composition of matter comprising a volatile lead compound and a halogenated aromatic compound.

20. A composition of matter comprising a lead alkyl compound and a chlorinated oil.

21. A composition of matter comprising a volatile lead compound and a volatile bromide compound.

22. A composition of matter comprising a lead alkyl compound and a volatile bromide compound.

23. A composition of matter comprising lead tetra ethyl and a volatile bromide compound.

24. A composition of matter comprising a lead alkyl compound, a volatile bromide compound and a halogenated oil.

25. A composition of matter comprising lead tetra ethyl, ethylene dibromide, and mono-chlorinated naphthalene.

THOMAS MIDGLEY, JR.

83 EXHIBIT 3-D

Patented Dec. 30, 1930 1,787,419

UNITED STATES PATENT OFFICE

THOMAS MIDGLEY, JR., OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GENERAL MOTORS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE

METHOD FOR USING MOTOR FUELS

No Drawing. Original application filed April 15, 1922, Serial No. 553,270. Patent No. 1,573,846, dated February 23, 1926. Divided and this application filed January 22, 1926. Serial No. 83,133.

This invention relates to fuels, such, for example, as kerosene and gasoline, employed in the operation of internal-combustion engines and to the art of burning the fuels in an engine. The present tendency is to produce lower grades of gasoline in order to obtain a sufficient output for the increasing demand for motor fuels and to reduce the compressions of the engines so that these lower grades of fuel may be used without knocking. As the lowering of engine compression reduces the efficiency of the engine, a still greater output of fuel is required to meet the increase in fuel required to operate larger and less efficient engines. The principal objects of the present invention are to overcome these difficulties and to provide a means for using either low or high grades of motor fuel more efficiently and so reduce the quantity of fuel used.

The present application is a division of my co-pending application Serial No. 553,270, filed April 15, 1922; now Patent No. 1,573,846, Feb. 23, 1926.

Kerosene, gasoline and the heavier hydrocarbons have the characteristic that, when a combustible gaseous mixture containing one of these fuels and air is burned in an internal combustion engine while subjected to a relatively high pressure, a fuel knock is produced, the engine heats rapidly, the efficiency of the engine is reduced, and, if the initial pressure is very high, engine parts may be injured. The highest pressure at which a mixture may be burned in a cylinder without producing a fuel knock varies with the different fuels and, to some extent, with the temperature, position of spark plugs and other conditions within the engine. This pressure I term the "critical compression pressure" of the fuel.

The average critical compression pressure of kerosene is about 50 pounds, of the poorer grades of gasoline about 75 pounds and of the 75 pounds are used generally, and internal-combustion engines for house lighting systems, trucks, tractors, and automobiles are designed to operate on these kinds of fuel.

I have found that the critical compression pressure of a fuel of the type mentioned above is increased by incorporating therewith any one of a large number of compounds containing metallic elements i. e., compounded metallic elements.

By way of example, I may use a fuel consisting by volume of ¼ of one percent of tetra ethyl lead and 99¾ per cent of gasoline having a normal "critical compression pressure" of about 75 pounds. The tetra ethyl lead dissolves in the gasoline forming a fuel having a "critical compression pressure" of about 160 pounds. The presence of the lead compound changes the gasoline from a low compression fuel to a higher compression fuel i. e. increases its "critical compression pressure". This gasoline may be used in an engine having a compression pressure of about 160 pounds with a smaller fuel consumption for obtaining a given amount of work than is required to operate an engine having a compression pressure of 75 pounds on the untreated gasoline. Experiments with automobiles have shown that if the engine compression is increased to 160 pounds, a treated fuel being used to run the engine and the gear ratio between the engine and the rear axle is reduced, the mileage obtained from a gallon of gasoline is substantially twice that obtained when running the engine at 75 pounds compression on the untreated or low compression fuel.

For some commercial purposes it will probably be sufficient to use but one part of tetra ethyl lead in 2000 parts of gasoline. This mixture may be used in a truck motor to avoid the knock generally produced when climbing hills at low speed with open throt-

bon, a volatile compound of a metal, and a lubricant.

6. A motor fuel comprising a hydrocarbon, a volatile compound of lead and a halogenated lubricating oil.

7. A motor fuel comprising a hydrocarbon, a volatile compound of lead and a halogenated oil.

8. A motor fuel comprising a hydrocarbon, a volatile compound of lead, and a chlorinated oil.

9. A motor fuel comprising a hydrocarbon, a volatile lead compound and a volatile bromide compound.

10. A motor fuel comprising a hydrocarbon, a hydrocarbon compound of lead, and a volatile bromide compound.

11. A motor fuel comprising a hydrocarbon, a lead alkyl compound, and a volatile bromide compound.

12. A motor fuel comprising a hydrocarbon, lead tetraethyl, and ethylene dibromide.

13. A motor fuel comprising a hydrocarbon, a volatile lead compound, a volatile halide compound, and a lubricant.

14. A motor fuel comprising a hydrocarbon, a volatile lead compound, a volatile bromide compound, and a lubricant.

17. A composition of matter comprising a volatile compound of a metal, and a halogenated lubricating oil.

18. A composition of matter comprising a volatile metal compound and a halogenated oil.

19. A composition of matter comprising a volatile lead compound and a halogenated aromatic compound.

20. A composition of matter comprising a lead alkyl compound and a chlorinated oil.

21. A composition of matter comprising a volatile lead compound and a volatile bromide compound.

22. A composition of matter comprising a lead alkyl compound and a volatile bromide compound.

23. A composition of matter comprising lead tetra ethyl and a volatile bromide compound.

24. A composition of matter comprising a lead alkyl compound, a volatile bromide compound and a halogenated oil.

25. A composition of matter comprising lead tetra ethyl, ethylene dibromide, and mono-chlorinated naphthalene.

THOMAS MIDGLEY, JR.

UNITED STATES PATENT OFFICE

THOMAS MIDGLEY, JR., OF DAYTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GENERAL MOTORS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF DELAWARE

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The present application is a division of my co-pending application Serial No. 553,270, filed April 15, 1922; now Patent No. 1,573,846, Feb. 23, 1926.

Kerosene, gasoline and the heavier hydrocarbons have the characteristic that, when a combustible gaseous mixture containing one of these fuels and air is burned in an internal combustion engine while subjected to a relatively high pressure, a fuel knock is produced, the engine heats rapidly, the efficiency of the engine is reduced, and, if the initial pressure is very high, engine parts may be injured. The highest pressure at which a mixture may be burned in a cylinder without producing a fuel knock varies with the different fuels and, to some extent, with the temperature, position of spark plugs and other conditions within the engine. This pressure I term the "critical compression pressure" of the fuel.

The average critical compression pressure of kerosene is about 50 pounds, of the poorer grades of gasoline about 75 pounds and of the better grades of gasoline about 125 pounds. The latter grade of gasoline is produced in limited quantities and is not available universally to the consumer. The commoner grades of fuel, such as kerosene and gasoline, having critical compression pressures below 75 pounds are used generally, and internal-combustion engines for house lighting systems, trucks, tractors, and automobiles are designed to operate on these kinds of fuel.

I have found that the critical compression pressure of a fuel of the type mentioned above is increased by incorporating therewith any one of a large number of compounds containing metallic elements i. e., compounded metallic elements.

By way of example, I may use a fuel consisting by volume of ¼ of one percent of tetra ethyl lead and 99¾ per cent of gasoline having a normal "critical compression pressure" of about 75 pounds. The tetra ethyl lead dissolves in the gasoline forming a fuel having a "critical compression pressure" of about 160 pounds. The presence of the lead compound changes the gasoline from a low compression fuel to a higher compression fuel i. e. increases its "critical compression pressure". This gasoline may be used in an engine having a compression pressure of about 160 pounds with a smaller fuel consumption for obtaining a given amount of work than is required to operate an engine having a compression pressure of 75 pounds on the untreated gasoline. Experiments with automobiles have shown that if the engine compression is increased to 160 pounds, a treated fuel being used to run the engine and the gear ratio between the engine and the rear axle is reduced, the mileage obtained from a gallon of gasoline is substantially twice that obtained when running the engine at 75 pounds compression on the untreated or low compression fuel.

For some commercial purposes it will probably be sufficient to use but one part of tetra ethyl lead in 2000 parts of gasoline. This mixture may be used in a truck motor to avoid the knock generally produced when climbing hills at low speed with open throttle. Relatively small proportional quantities of the lead compound are required to increase the critical compression pressure of "aviation" gasoline from 125 pounds to 160 pounds or more.

The fuel mixture or combination may also be varied by using other fuels as the fuel base

or major constituent of the high compression fuel and using other compounded metallic elements to increase critical compression pressure. The fuels used include gasoline and other hydrocarbon fuels containing hydrocarbons which may be obtained from an asphalt, naphthene, paraffine base crude or mixtures thereof.

Other lead compounds which have been used successfully are the phenyl compounds and other alkyl compounds besides tetra ethyl lead. These include the ethyl, isopropyl and method compounds. Methods of manufacturing lead compounds are described on page 134 et. seq., Vol. 111 of Watts' Dictionary of Chemistry as revised by Morley and Muir and published by Longmans, Green and Co., London, England.

Other metallic compounds may be used to suppress a knock in a motor. These include compounds of selenium, tellurium, tin, arsenic and antimony. The phenyl and alkyl compounds of these metals have been successfully used where the stable compounds are obtainable. The alkyl metal compounds usually have a greater knock suppressing value than the corresponding phenyl compounds.

Dissolving a knock suppressing substance in a hydrocarbon fuel has been found the most satisfactory method of changing the critical compression pressure of the fuel, and for this reason the organic compounds have been employed to a greater extent than other compounds in suppressing knocks, however, I do not limit my invention to organic compounds nor to the oil soluble compounds.

The value of metallic compounds in changing the critical compression pressure depends upon the metal used, the composition of the compounds, its stability and volatility. Up to the point of complete vaporization the anti-knock value depends in part on the percentage of the compound vaporized under engine conditions. Where the nature of the compound changes before ignition of the fuel, combustion of the fuel takes place in the presence of the new compound and the anti-knock value depends on the nature of the new compound instead of the compound added to the fuel.

If a radical is attached to the metal in the compound in such a manner that the resulting compound is oil soluble and volatile, a high anti-knock value for that metal is obtained. As the compound departs from these conditions either in the kind of radical employed or the number of [illegible] volatile and less soluble in the fuel than the tetra ethyl lead. The tri-ethyl lead hydroxide is almost as powerful a knock suppresser as the tetra ethyl lead.

The value of a compounded metallic element as a knock suppresser appears also to be a period function of the atomic number and, in general, with similar elements increases with increasing atomic weight. To illustrate this function, I take the ethyl compounds of the metals in the right hand column of the 4th, 5th, and 6th groups, wherever stable ethyl compounds are obtainable. As the ethyl compound of antimony is unstable in the air at room temperature, I employ the phenyl compound of antimony. These compounds increase in knock suppressing value in group 4 in the order tin, lead; in group 5 in the order arsenic, antimony; and in group 6 in the order selenium, tellurium. Taking group 4 as an example, 1% by volume of the ethyl compounds of the metals in gasoline or kerosene give the following increases in critical compression pressure: tin, 15 pounds; lead at the rate of 340 pounds when employed in relatively small quantities.

While I have mentioned more particularly the use of phenyl and alkyl compounds of certain metals for increasing the critical compression pressure of kerosene and gasoline, my invention is not limited wholly to the use of these compounds, nor to compounds of these metals, and the compounded metallic elements may be employed with the heavier hydrocarbon or other fuels.

Further, while the specific examples herein given constitute preferred forms of embodiment of the invention, it is to be understood that other forms might be adopted, without departing from the scope of the claims which follow.

I claim:

1. A method of utilizing a low compression motor fuel which comprises forming a combustible mixture of the fuel and air, and burning the mixture under a relatively high compression in the presence of vapors of a compounded metallic element.

2. A method as defined in claim 1, in which the gaseous low compression fuel is burned in the presence of a vaporized alkyl compound of a metal.

3. A method as defined in claim 1, in which the gaseous low compression fuel is burned in the presence of a gaseous ethyl compound of a metal.

other hydrocarbon fuels containing hydrocarbons which may be obtained from an asphalt, naphthene, paraffine base crude or mixtures thereof.

Other lead compounds which have been used successfully are the phenyl compounds and other alkyl compounds besides tetra ethyl lead. These include the ethyl, isopropyl and method compounds. Methods of manufacturing lead compounds are described on page 134 et. seq., Vol. 111 of Watts' Dictionary of Chemistry as revised by Morley and Muir and published by Longmans, Green and Co., London, England.

Other metallic compounds may be used to suppress a knock in a motor. These include compounds of selenium, tellurium, tin, arsenic and antimony. The phenyl and alkyl compounds of these metals have been successfully used where the stable compounds are obtainable. The alkyl metal compounds usually have a greater knock suppressing value than the corresponding phenyl compounds.

Dissolving a knock suppressing substance in a hydrocarbon fuel has been found the most satisfactory method of changing the critical compression pressure of the fuel, and for this reason the organic compounds have been employed to a greater extent than other compounds in suppressing knocks, however, I do not limit my invention to organic compounds nor to the oil soluble compounds.

The value of metallic compounds in changing the critical compression pressure depends upon the metal used, the composition of the compounds, its stability and volatility. Up to the point of complete vaporization the anti-knock value depends in part on the percentage of the compound vaporized under engine conditions. Where the nature of the compound changes before ignition of the fuel, combustion of the fuel takes place in the presence of the new compound and the anti-knock value depends on the nature of the new compound instead of the compound added to the fuel.

If a radical is attached to the metal in the compound in such a manner that the resulting compound is oil soluble and volatile, a high anti-knock value for that metal is obtained. As the compound departs from these conditions either in the kind of radical employed or the number of radicals of a certain kind in the compound, the anti-knock value will generally be reduced. Examples of compounds in which the anti-knock value, as based on these conditions, becomes negligible are lead oleate and lead acetate. If, in the formula for tetra-ethyl lead, an OH radical is substituted for an ethyl radical, the resulting compound (tri-ethyl lead hydroxide) is less

The value of a compounded metallic element as a knock suppresser appears also to be a period function of the atomic number and, in general, with similar elements increases with increasing atomic weight. To illustrate this function, I take the ethyl compounds of the metals in the right hand column of the 4th, 5th, and 6th groups, wherever stable ethyl compounds are obtainable. As the ethyl compound of antimony is unstable in the air at room temperature, I employ the phenyl compound of antimony. These compounds increase in knock suppressing value in group 4 in the order tin, lead; in group 5 in the order arsenic, antimony; and in group 6 in the order selenium, tellurium. Taking group 4 as an example, 1% by volume of the ethyl compounds of the metals in gasoline or kerosene give the following increases in critical compression pressure: tin, 15 pounds; lead at the rate of 340 pounds when employed in relatively small quantities.

While I have mentioned more particularly the use of phenyl and alkyl compounds of certain metals for increasing the critical compression pressure of kerosene and gasoline, my invention is not limited wholly to the use of these compounds, nor to compounds of these metals, and the compounded metallic elements may be employed with the heavier hydrocarbon or other fuels.

Further, while the specific examples herein given constitute preferred forms of embodiment of the invention, it is to be understood that other forms might be adopted, without departing from the scope of the claims which follow.

I claim:

1. A method of utilizing a low compression motor fuel which comprises forming a combustible mixture of the fuel and air, and burning the mixture under a relatively high compression in the presence of vapors of a compounded metallic element.

2. A method as defined in claim 1, in which the gaseous low compression fuel is burned in the presence of a vaporized alkyl compound of a metal.

3. A method as defined in claim 1, in which the gaseous low compression fuel is burned in the presence of a gaseous ethyl compound of a metal.

In testimony whereof I hereto affix my signature.

THOMAS MIDGLEY, Jr.

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EXHIBIT 64

REGULATIONS

For Handling and Mixing

ETHYL FLUID

By Means of Tank Equipment

and

For Related Activities

(To apply without alteration to the handling of "Q" Fluid by tank equipment)

Issued by

MEDICAL DEPARTMENT

ETHYL GASOLINE CORPORATION

DR. ROBERT A. KEHOE, Director

DATE, FEBRUARY 18, 1938

Note: These Rules and Regulations supersede all Rules and Regulations previously issued, and should be carefully studied and followed.

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REGULATIONS

For Handling and Mixing

ETHYL FLUID

By Means of Tank Equipment
and
For Certain Other Related Activities
(To apply without alteration to "Q" Fluid)

I. REGULATIONS OF DIRECT CONCERN TO RESPONSIBLE OFFICIALS OF DISTRIBUTING COMPANIES

The attention of the management of plants in which ETHYL Fluid is mixed with gasoline is directed to certain matters for which the management is responsible, and which are of fundamental importance in safeguarding the handling of the Fluid.

A. The Selection of the Personnel.

1. Intelligent young men who can understand the instructions given to them, and who can be depended upon to carry them out with precision, should be selected to do the mixing and to carry out all other operations on tank-cars, tank-trucks, or mixing equipment.

2. As few men should be used as are needed to do the work and all must be instructed regarding the dangers of carelessness when handling ETHYL Fluid. All handling of ETHYL Fluid before it is mixed into gasoline is to be done by this same group of men.

3. The men selected shall be used only *after* and as long as they are approved as to physical fitness by a medical representative of Ethyl Gasoline Corporation.

B. The Utilization of Adequate Mixing Equipment.

1. Each mixing system must be built in precise accordance with a blue print submitted by the distributing company and approved by Ethyl Gasoline Corporation. Such a blue print is based upon a representative drawing and upon specifications furnished by Ethyl Gasoline Corporation. The specifications must cover not less than the following requirements, as purely hygienic considerations.

(a) A fire-proof building with space sufficient for the installation of an ETHYL Fluid storage tank, for the operation of all mixing equipment, and for housing adequate washroom facilities, must be constructed at a point not too intimately associated with other buildings.

(b) The building must have a concrete floor with a concrete pit for the ETHYL Fluid storage tank sufficient in capacity to hold the contents of the tank in case of leak, and it must be supplied with adequate drains connected with a sewer. It must also be supplied adequately with water lines and suitable hose and with a convenient supply of kerosene for washing down. The entrances must be fitted with adequate locks.

(c) There must be a wash room and locker room for the use of the workmen, supplied with a shower bath and wash basin with hot and cold running water, and with space sufficient for two lockers for each workman, one for clean and one for used clothing. A supply of kerosene shall be available in the wash room. Toilet facilities are advisable at all mixing plants, and mandatory when the time required for mixing extends over a period of hours.

2. In addition to two lockers, each person who works in the mixing plant must be furnished two sets of clothing, consisting of underwear, socks, outer clothing, cap, shoes and rubber gloves. In warm weather overalls may be used as outer clothing but heavier clothing must be provided as needed. The clothing should be white, so that all stains or spots can be seen. The rubber gloves must be heavy enough to stand use without tearing. Canvas gloves with leather palms may be used over the rubber gloves to protect them. Leather shoes must not be used. The heavy acid-proof rubber and canvas boot is recommended and rubber-soled tennis shoes are satisfactory.* Rubber boots must be supplied for washing down the floor of the building.

3. Each person working in the mixing plant must be supplied with a gas mask which is equipped with a rubber face-piece, covering the entire face, eyes, nose and mouth (similar to the Tissot type) with eye-pieces of splinterless glass, rubber breathing tube, and a canister separate from the face-piece, containing not less than 500 cc. of high grade activated charcoal.

* Where general refinery rules forbid the use of shoes with soft toes, ordinary tennis shoes may not be used.

4. Soap, hand brushes, and towels must be supplied in adequat quantities for the wash room, and replacements of all equipmen must be made in accordance with the needs of the men in carryin out the instructions given them. (See Section II)

C. Maintenance of Equipment, Repair of Leaks, and Emergenc Measures.

1. The apparatus for emptying tank-cars or trucks and for stor ing ETHYL Fluid is designed so as to be a *closed* system at all time Only by keeping it entirely closed can it be operated with safet in the building in which it is installed. Accordingly the developmen of leaks or the necessity for repairs constitutes a situation that call for unusual caution and special technique.

2. All leaks or necessity for repairs should be reported immedi ately to the Ethyl Gasoline Corporation or its authorized representa tive. No repair work should be done until such representative i present or until he has given permission to proceed with the neces sary corrections.

3. Under no circumstances is the ETHYL Fluid storage tank t be opened by the mixing or the refinery maintenance personnel.

4. In the event of the escape of any ETHYL Fluid from tank car or truck, all persons are to leave the vicinity at once and not t return except as they are equipped with proper clothing and ga masks. If a break or leak should occur within a mixing plant, th building must be evacuated promptly by all persons except thos equipped with proper clothing and gas masks. All contact with Fluid and all inhalation of vapor from Fluid is to be avoided with th utmost care.

D. The Posting of Instructions and Notices at the Mixing Plant

A placard containing detailed instructions to the men who carr out mixing operations, as given in Sections II and III below, shall b posted in a conspicuous place at the mixing plant. A notice must also be posted forbidding the entrance to the mixing plant of all persons except those who have been authorized and taught to carry out mixing operations. This notice must be enforced, and the building must be kept locked except when in use.

E. The Avoidance of Irregular Practices in Mixing.

1. Safety in commercial mixing operations is based upon the use of specifically designed and authorized mixing equipment under specified regulations with which workmen must be familiar. The management must be equally familiar with the details of regulations, and should refrain from any commercial arrangements or any orders to workmen which require or imply violation of the spirit or letter of the regulations.

2. These regulations are concerned solely with the handling of Ethyl Fluid by means of storage-tank equipment. If, in an emergency, it is necessary to handle drums (barrels) of ETHYL Fluid at a mixing point equipped only with storage-tank facilities, a drum-eductor system must be installed under the supervision of a representative of Ethyl Gasoline Corporation.

3. In every detail which involves the transportation, handling, storage, emptying and washing out of drums (barrels) of Fluid, as distinguished from mixing operations involving only the withdrawal of Fluid from the weigh-tank, the *Regulations for Handling and Mixing Ethyl Fluid at Mixing Plants at Which Fluid Storage Tanks are Filled from Drums* must be put into effect.

F. The Promotion of Safety in Other Plant Activities Related to ETHYL Fluid.

The regulations contained in Sections IV and V of this booklet involve the safety of persons other than the mixing personnel and require the attention of the management. They should be studied carefully.

The Regulations contained in Sections II and III below are made into a placard and must be posted in a conspicuous place in mixing plants.

II. GENERAL REGULATIONS

ETHYL Fluid is poisonous when it gets into the body. It may get into the body through your skin, or by way of dirty hands into your mouth, or may be breathed into your lungs when the vapor is in the air you breathe. The following directions will tell you how to work with ETHYL Fluid and yet keep it out of your body.

A. Description and Care of Equipment to be Used by Men Employed in Mixing Plants.

1. Each person who works in the plant must be given two lockers, one for clean clothing, the other for used clothing, and two sets of clothing consisting of underwear, socks, outer clothing, cap, shoes, and rubber gloves. In warm weather overalls may be used as outer clothing, but heavier clothing must be provided as needed. The clothing should be white so that all stains or spots can be seen.

The rubber gloves must be heavy enough to stand use without tearing. Canvas gloves with leather palms may be used over the rubber gloves to protect them. Leather shoes must not be used. The heavy acid-proof rubber and canvas boot is recommended, and rubber soled tennis shoes are satisfactory.* Rubber boots must be worn when washing the floor.

2. Each person working in the mixing plant must be supplied with a gas mask which is equipped with a rubber face-piece covering the entire face, eyes, nose and mouth (similar to the Tissot type) with eye-pieces of splinterless glass, a rubber breathing tube, and a canister separate from the face-piece, containing not less than 500 cc of high grade activated charcoal.

3. The clothing and other equipment must be inspected after each period of use.

(a) The canister of the mask must be renewed after 100 hours of normal use, or at the end of six months, whichever is the shorter period. A record of the use of each canister must be kept. If, by reason of emergency, the mask should be used continuously for some hours in a high concentration of vapors of Fluid, within the building, the canister must be discarded.

(b) The mask must be examined thoroughly after each period of use and if contaminated it must be cleaned with kerosene, followed by soap and water. The face-piece should be washed off with soap and water after each period of use. When not in use the mask should be kept in a receptacle which will keep it clean, and the canister should be kept sealed to avoid absorption of moisture and other vapor.

* Where general refinery rules forbid the use of shoes with soft toes, ordinary tennis shoes may not be used.

(c) The outer clothing must be laundered if dirty or spotted with Fluid. If spotted with Fluid, it must first be rinsed repeatedly in kerosene, or in a non-inflammable dry-cleaning liquid, after which it should be laundered.

(d) Gloves, and boots or shoes must be cleaned with a quick-drying solvent if they show any stains of Fluid.

(e) Any rubber equipment which becomes spongy or weakened must be discarded.

4. The wash room of each mixing plant must be provided with a shower bath and wash basin furnished with hot and cold water, with a convenient receptacle containing kerosene, and with soap and towels. Toilet facilities should also be installed.

B. How to Keep Your Skin Clean.

1. Do not wear your ordinary clothing while working with ETHYL Fluid. Put your own clothing in a clean locker and dress from the skin out in clean work clothing.

2. Do not put on any clothing which has not been laundered after being in contact with ETHYL Fluid.

3. When you finish working with ETHYL Fluid take off all your clothing, hang it up in a locker provided for the purpose, and bathe carefully with soap and hot water.

4. Do not touch anything having ETHYL Fluid on it with your bare hands.

5. Do not spill or splash ETHYL Fluid.

6. If you should get the Fluid on any part of your skin stop what you are doing at once, remove your clothes, and clean the Fluid off. Wash the part with kerosene, and then wash off all the kerosene with soap and hot water.

7. If you must touch anything having ETHYL Fluid upon it, put on your rubber gloves. Be sure your rubber gloves are in perfect condition. If they have a hole in them or if they are spongy, they are more dangerous than no gloves at all.

8. If your clothes are splashed or wet with ETHYL Fluid, take them off. The Fluid will soak through and get on your skin.

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C. How to Keep Poison Out of Your Mouth.

1. Do not put your fingers into your mouth, and do not handle anything that goes into your mouth without washing your hands carefully. Wash the hands carefully before meals, and before putting tobacco or other articles into your mouth. Use plenty of soap and a brush, being sure to brush the entire surface of the hands, and under the nails. Keep your finger nails short and clean.

D. How to Keep From Breathing Fumes from ETHYL Fluid.

1. Whenever you can smell the Fluid you are breathing it in. Do not stay in any place where you can smell ETHYL Fluid. It is possible to prevent such fumes from being present where you work. See that this is done. If you can smell the Fluid there is a leak, or there has been a spill. The management must be notified, and the faulty conditions must be corrected before work is continued. If you must work for a short time in a place where the smell of the Fluid is noticed, put on a gas mask. Test it to be sure it fits properly and does not leak. This allows you to breathe pure air.

E. Care of General Health.

1. Eat regularly of a well mixed diet. Do not go to work without breakfast and do not adopt unusual diets except as prescribed by a physician for some special reason.

2. When you are sick in any way, whether from a bad cold or any other thing, do not work in the mixing plant. Report to the foremen and consult the refinery doctor. Sickness of any kind is reason enough for not working with material containing lead.

3. Your teeth should be kept clean and in good condition. Clean them twice daily, brushing them carefully. If your gums bleed when you brush your teeth, consult your dentist. Do not keep old snags and roots of teeth in your mouth. Have them pulled. They are a menace to your health.

4. Keep the bowels regular. When a cathartic is needed use Epsom Salts or Magnesium Citrate or Seidlitz Powders.

5. Drink water freely and regularly.

A. Unloading Tank-Cars of ETHYL Fluid.

1. When the full tank-car of ETHYL Fluid is placed at the unloading site, the car brakes should be set prior to connecting the swing line. The car should be adequately protected against collision or removal.

2. When the unloading line has been connected to the tank car, the entire unloading and gasoline washing operation must be completed forthwith. Men shall remain at the plant constantly and maintain careful supervision of the operation until the last gasoline wash has been evacuated and the unloading line is disconnected.

3. Under no conditions should tank-cars be sampled.

4. The "Poisonous" placards should be kept in place while the tank-car is being emptied.

5. All persons in any way concerned with the work of opening the car and making the proper connections are to be provided with the regulation clothing prescribed in the foregoing section, with rubber and canvas gloves, and with gas masks. This work shall be done only by those persons designated for the purpose and kept under medical supervision.

6. By use of the key supplied, the lock in the car dome may be removed and opened; and a careful inspection shall be made to determine whether or not any ETHYL Fluid has escaped into the dome of the car. There should be no evidence of any stain, nor should there be any odor of ETHYL Fluid. If such is present the operator should put on his gas mask at once and remove all Fluid by swabbing the area with clean kerosene on waste or cloth, disposing of the waste, (preferably by burning), as soon as the job of cleaning is completed.

7. None of the valves should be opened until the swing line has been connected.

B. Washing Out and Releasing Tank-Cars.

1. After the Fluid has been emptied into the storage tank through the vacuum system, the tank-car should be washed out with gasoline. Such washing not only removes the last of the Fluid which has been purchased, but it also should wash out the entire line from tank-car to storage tank in such a way as to free it of ETHYL Fluid. To accomplish this properly repeated washing is necessary.

Not less than 200 gallons of gasoline should be introduced into the tank-car, and the process should then be repeated by again introducing and removing not less than 1000 gallons of gasoline for a 3000 gallon car, or 2000 gallons of gasoline for a 6000 gallon car.

2. After the car has thus been thoroughly cleaned, the combination gauge should be taken off and the vent valve closed. The valve on the end of the swing line should be closed tightly, and the proper discharge valve on the tank-car should be left open for a few minutes in order that any residual liquid in the connections may properly drain. Then tightly close this latter valve, disconnect the swing line and replace the blank flange on the top of the tank-car valve. All spillage must be absolutely avoided and will be if this procedure is carried out.

An inspection should be made to make certain that all valves are closed and that all flanges are bolted in place. In the event that the car is either received or returned with any of the equipment in defective condition, immediate notification should be sent to the Ethyl Gasoline Corporation, Manufacturing Department, P. O. Box 1271, Wilmington, Delaware. Should it be found that the tank shows any leakage, wire immediately, charges collect, Ethyl Gasoline Corporation, Wilmington, Delaware.

(a) If major defects endangering the safe return of the car are discovered, immediately communicate the facts to the nearest division office or the nearest representative of Ethyl Gasoline Corporation.

(b) Minor defects that will not affect safe return may be reported to the Manufacturing Department, as above.

(c) After the car has been ascertained to be in satisfactory condition for return, the dome cover should be locked in place and the track banners removed.

(d) The placards should now be reversed to read "Dangerous Empty".

(e) Under no condition should any ETHYL Fluid tank-car be used for any other purpose than for the transportation of Motor Fuel Anti-Knock Compounds. Its use for other purposes, is prohibited by the Interstate Commerce Commission.

3. On completion of the above procedures the operators should bathe and resume their customary clothing.

C. Unloading, Washing and Releasing Tank-Trucks of ETHYL Fluid.

The provisions of Articles A and B, immediately preceding, must be applied in dealing with Fluid received in tank-trucks, but with due regard to slight variations in the equipment.

1. Care must be exercised in blocking the truck in position so as to avoid movement during unloading.

2. In washing out the tank the volume of gasoline introduced must be adapted to the capacity of the tank.

D. Mixing ETHYL Fluid with Gasoline.

1. When a mix is to be made it is not necessary that clothing be changed or that the operator bathe afterward except as some unforeseen occurrence may introduce the opportunity for exposure to ETHYL Fluid. In any case, clothing and mask shall be available to make possible the avoidance of exposure in any emergency. Care must be exercised to detect any possibility of exposure to Fluid through skin contact or inhalation of vapors.

2. If a situation should arise which makes necessary the use of protective clothing and masks, the operator should carry out all the provisions of the General Regulations as to clothing, bathing, and care of equipment.

3. Any dye needed to bring up the color to standard shall be prepared outside the mixing and storage building, and shall be handled in such a manner as not to stain the floor, or the clothing of the operators, to the end that dye stains on equipment and clothing of operators may be *known* to be due to ETHYL Fluid. Dye or inhibitor mixtures should not pass through the lines within the mixing plant.

E. Maintenance of Equipment, Repair of Leaks, and Emergency Measures.

1. The apparatus for emptying tank-cars or trucks and for storing ETHYL Fluid is designed so as to be a *closed* system at all times. Only by keeping it entirely closed can it be operated with safety in the building in which it is installed. Accordingly the development of leaks, or the necessity for repairs constitutes a situation that calls for unusual caution and special technique.

2. All leaks or necessity for repairs should be reported immediately to the Ethyl Gasoline Corporation or its authorized representative. No repair work should be done until such representative is present or until he has given permission to proceed with the necessary corrections.

3. Under no circumstances is the ETHYL Fluid storage tank to be opened by the mixing or refinery maintenance personnel.

4. In the event of the escape of any ETHYL Fluid from tank car or truck, all persons are to leave the vicinity at once and not to return except as they are equipped with proper clothing and gas masks. If a break or leak should occur within a mixing plant, the building must be evacuated promptly by all persons except those equipped with proper clothing and gas masks. All contact with Fluid and all inhalation of vapor from Fluid is to be avoided with the utmost care.

5. Any spill or dripping of ETHYL Fluid or Fluid diluted with gasoline, within the mixing and storage enclosure, is to be cleaned up by generously flushing the area with kerosene and then with large quantities of water.

6. Pipe lines and other apparatus which are discarded as a result of repairs or changes should be burned to a red heat on a distant isolated spot, or buried.

7. Tools contaminated with ETHYL Fluid should be washed off with kerosene in sufficient excess to remove all Fluid.

The Regulations contained in Section IV below are to be regarded as the minimal requirements for safe laboratory practice in relation to ETHYL Fluid. They should be issued to the laboratory staff wherever Fluid is handled, with the exception of those to whom detailed instructions have been issued by the responsible authorities of the distributing company.

IV. REGULATIONS FOR HANDLING ETHYL FLUID IN EXPERIMENTAL AND TESTING LABORATORIES.

A. ETHYL Fluid and concentrated mixtures of ETHYL Fluid in gasoline or benzol, regardless of the amounts involved, must be handled by laboratory workers with precautions against skin contact and inhalation equivalent to those required of men engaged in mixing operations. Only chemists or persons with sound laboratory training should be permitted to handle the Fluid.

B. All persons whose work in laboratories involves chance contacts with ETHYL Fluid or concentrated solutions of Fluid, as janitors, wash-boys, and other assistants, must be given specific instructions for the avoidance of contact or exposure.

C. The Fluid or concentrated solutions of it, should never be handled in large quantities in a laboratory.

D. Provision must be made for the storage of such Fluid as is required for laboratory purposes in tightly closed containers in a naturally ventilated, locked enclosure where it is accessible only to those who have been made responsible for its disposition.

E. Skin contact must be avoided by careful handling of the Fluid and by using impervious gloves if an article wet with Fluid must be touched.

F. Inhalation of vapor should be avoided by handling Fluid or concentrated solutions in a chemical hood which is adequately ventilated by lateral or down-draft suction.

G. Containers for Fluid or pieces of equipment contaminated with Fluid, which are open to the air in any way, must be kept and handled in the hood. The suction must be maintained while such articles are in the laboratory — i.e., until they have been cleaned up or otherwise disposed of.

H. In the event of spillage of ETHYL Fluid on the skin or clothing or on the floor, desks, or other equipment of the laboratory, it must be cleaned up at once. The skin should be washed thoroughly with kerosene or gasoline, followed by soap and water. Stained clothing should be removed promptly and rinsed repeatedly in gasoline, naphtha, or in non-inflammable dry cleaning fluids. Shoes and other leather articles cannot be cleaned and must be destroyed. Floors and equipment may be cleaned thoroughly with kerosene or with other suitable solvent, and then with soap and water. Rags, waste or other materials employed to wipe up spilled Fluid must be burned promptly or otherwise destroyed.

I. The handling of ETHYL Fluid by laboratory workers outside the laboratory, in making small mixes with liter cans for experimental purposes, or in *any other* manner, shall be done with the same precautions as are required of workmen in mixing plants. Such activities must be confined strictly to legitimate testing and experimental procedures. In all instances a gas mask, a rubber apron, and rubber gloves must be worn. The mask must have a rubber face-piece covering the entire face, eyes, nose and mouth, with eye-pieces of splinterless glass, a rubber breathing tube, and a canister separate from the face-piece, containing not less than 500 cc. of high grade activated charcoal. The apron must be of heavy rubber or rubberized cloth, while the gloves must be heavy enough to stand average use without tearing, and yet of such thinness and pliability as to permit precision in carrying out necessary laboratory manipulations.

V. INSTRUCTIONS FOR CLEANING TANKS USED FOR MIXING AND STORING LEADED GASOLINE AT REFINERIES AND MIXING PLANTS.

(The usual refinery rules for cleaning gasoline tanks do not provide safety against sludge and scale from tanks used for leaded gasoline, and the following rules must be added.)

A. Inside surfaces of the tank must be kept wet during the entire process of cleaning, to prevent breathing dust.

B. All workmen who enter the tanks must wear ***blower type air-line hose masks.***

C. All workmen must be furnished special coveralls, shirts, underwear, and socks; they must also wear heavy, acid-proof gloves in perfect condition, and rubber boots of good quality and in perfect condition.

D. Clothing must be changed and the face and hands must be cleaned at lunch time. At the end of work the clothing must be changed and a shower bath must be taken. The clothing must not be worn longer than one day, after which it must be laundered. Boots and gloves must be cleaned daily. If clothing is accidentally soaked with sludge from the bottom of the tank, it must be changed at once. Tools and the face-pieces of the masks must be cleaned daily.

E. Hose-lines for air-line masks have a limited life, and should be kept as clean as possible. They should be cleaned daily, and before being put away, preferably by hosing with water, thoroughly, to remove adherent material. When the odor of gasoline can be detected in the air stream, work must be discontinued promptly until the cause has been ascertained, or until a new hose-line has been substituted.

F. Sludge from the tank must not be left where anyone will come in contact with it. The sludge should be taken from the tank in a wet state and buried at some point where workmen will not uncover it in making excavations.

NOTE. Tank repairmen and welders must also follow these rules when working in tanks from which sludge and scale have not been removed. It is recommended that repairs and welding operations be carried out only after thorough removal of sludge, scale, and dust.

Form 336 L 52236 1500 3-38 Printed in U. S. A.

Form QD 37

EXHIBIT 9-A

ETHYL GASOLINE CORPORATION

LICENSE AND SALES AGREEMENT

THIS AGREEMENT, made in duplicate this _____ by and between ETHYL GASOLINE CORPORATION, a Delaware Corporation, as Licensor (however, for the purpose of more easily distinguishing between it and Licensee the Licensor will be referred to hereafter as Seller), and

a _____ Corporation, as Licensee (however, for the purpose of more easily distinguishing between it and Licensor, the Licensee will be referred to hereafter as Buyer).

WHEREAS, the Seller has been and is engaged in the devising and development of "Q" Brand of Anti-Knock Compound (the basic ingredient of which is now tetraethyl lead) which is for use in small proportions with motor fuel to reduce and/or prevent knocking of internal combustion engines, and is the sole and exclusive licensee under certain patents therefor, namely, United States Patents Number 1,573,846 of February 23, 1926, and Number 1,668,022 of May 1, 1928, and Number 1,787,419 of December 30, 1930, among others; and

WHEREAS, Buyer is engaged in the business of refining and selling gasoline and desires to sell during the continuance of this agreement a gasoline containing said anti-knock compound and for this purpose is desirous of purchasing same from Seller and obtaining from it a license under said patents to mix said anti-knock compound with gasoline and to sell the resultant product; and

WHEREAS, the Surgeon General of the United States Public Health Service has promulgated certain rules and regulations to be observed in connection with the handling and mixing of said anti-knock compound with gasoline and the distribution, use and consumption of the gasoline when treated with said anti-knock compound; and

WHEREAS, the parties hereto recognize that the purposes set forth in the preceding paragraphs can be effected only if proper precautions and care are used in the manufacture, distribution, use and consumption of gasoline treated with said anti-knock compound, and desire that the business contemplated being done under this license shall be conducted in accordance with the rules so promulgated and/or recommended by the Surgeon General of the United States Public Health Service and such other rules as may be now in existence or hereafter issued from time to time by that office, the Department of Health of the State and/or Municipality wherein such manufacture and/or sale is or are conducted, and any other governmental agency having jurisdiction in the premises, and with such care as to reduce to a minimum any possible risk of injury and exposure to employees and the public.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That in consideration of the premises and of the covenants and agreements hereinafter set forth, said parties agree as follows:

I. LICENSE

Seller hereby licenses Buyer to manufacture gasoline containing said "Q" Brand of Anti-Knock Compound in the United States of America at the following points:

_____

and to sell and deliver same in the territory of the United States of America mentioned in the Addendum hereto, in the following manner and not otherwise.

(a) To oil companies holding a license from Seller to manufacture gasoline containing said anti-knock compound.

(b) To oil refining companies and jobbers who hold a license from Seller to sell (but not manufacture) gasoline containing said anti-knock compound.

(c) To actual users or consumers thereof, and in less than tank car lots directly to retail dealers for delivery directly by said dealers to users and consumers thereof.

(d) The gasoline manufactured hereunder shall be sold by the Buyer as the next highest priced motor fuel below Buyer's Ethyl Gasoline, and shall be Buyer's best non-premium gasoline referred to in the agreement between Seller and Buyer in respect to the manufacture and sale of Ethyl Gasoline.

Buyer agrees to discontinue deliveries of gasoline containing said anti-knock compound to any licensee referred to in subdivisions "(a)" and "(b)" immediately upon written notice to Buyer by Seller of the revocation of such licensee's license.

It is understood between the parties that "gasoline" includes any motor fuel; "anti-knock compound" refers to "Q" Brand of Anti-Knock Compound; and "treated gasoline" means any gasoline or motor fuel with which the said compound is mixed, wherever same may appear in this agreement.

II. PURCHASE AND SALE OF ANTI-KNOCK COMPOUND

Seller agrees to sell to Buyer said anti-knock compound, on orders received therefor, in suitable drums (containing not less than 50 U.S. Gallons of said anti-knock compound), or in tank trucks or tank cars, f.o.b. Seller's plant, but on shipments made in Seller's tank cars Seller will, effective January 1, 1937, prepay and absorb the freight from Seller's plant to destination, and on shipments made in Seller's tank trucks, Seller will, effective January 1, 1937, absorb the cost of delivery from Seller's plant to destination, with the understanding that Seller reserves the right to refuse to make tank truck deliveries whenever in Seller's opinion same are not practical and within a reasonable trucking distance from its plant, on the following terms:

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Effective on the signing of this agreement and during the period in the year 1937 that this agreement shall be in existence, the Seller agrees to sell and Buyer to pay Seller for all shipments of said anti-knock compound the sum of nine dollars and eighty-four and one-tenths cents ($9.841) per U.S. Gallon of commercially pure tetraethyl lead contained therein (which is equivalent to twenty-six one-hundredths (26/100) of a cent per cubic centimeter of commercially pure tetraethyl lead). Payment for said tetraethyl lead is to be made net cash within thirty (30) days after shipment.

Buyer shall pay Seller ten dollars ($10) for each drum in which said anti-knock compound is shipped and shall return the drums within thrity (30) days after they are emptied to Seller, freight collect, at such place or places as Seller may from time to time designate, and Seller shall pay Buyer ten dollars ($10) for each such drum so returned in as good condition as received by Buyer, ordinary wear and tear excepted.

II. HEALTH QUIREMENTS LATIVE TO NDLING AND XING OF ID ANTI-OCK COM-OUND AND STRIBUTION F GASOLINE NTAINING IT

(a) The mixing of said anti-knock compound with gasoline shall be done at the refinery or refineries of the Buyer, except for the existence of extraordinary circumstances, and then only upon the express written approval of Seller. The type and construction of the equipment and system employed for mixing shall in all cases meet with approval of Seller.

(b) Buyer agrees that it will carry out the handling and mixing of said compound with gasoline and the distribution and sale of the treated gasoline in accordance with the rules and regulations now in existence or which may be hereafter issued from time to time by the Seller, or the office of the Surgeon General of the United States Public Health Service, the Department of Health of the State and/or municipality wherein the mixing is done and the sales and distribution take place, and any other governmental agency having jurisdiction in the premises, and that it will have its employees properly instructed in respect to said rules and regulations.

(c) Buyer agrees that whenever it sells said treated gasoline for resale it will obligate the purchaser to comply with the provisions of the preceding paragraphs insofar as such provisions may apply to health measures in connection with its distribution and sale, and will supply the purchaser with notices giving information, instructions and rules for the guidance of employees and the public. In making such sales Buyer agrees to reserve the right to and will cancel such contract or contracts of sale in the event the purchaser or purchasers do not comply with any of the said requirements. Further, Buyer will require the said purchaser or purchasers to impose similar obligations for any and all subsequent sales of the said gasoline for resale, including the reserved right of cancellation and agreement to cancel for failure to comply.

(d) Medical and mechanical representatives of Seller shall be afforded every reasonable facility to inspect any of the apparatus, equipment or other property used by Buyer and the system employed by it, in connection with the handling of said

anti-knock compound, and the manufacture, distribution and sale of said gasoline. Buyer agrees to carry out and make the changes and/or repairs as such inspectors may from time to time reasonably require. Buyer agrees to permit the medical representatives of Seller to examine anyone under the control of Buyer whose work may have exposed him to the said anti-knock compound or to said treated gasoline, at any reasonable time said representatives may desire, and to follow all reasonable recommendations of such representatives as to observation, care and treatment of such persons. It is agreed Seller assumes no responsibility for or by reason of the issuance, promulgation or following of such rules, regulations and recommendations, nor as a result of such inspection and/or changes and repairs made as required by Seller, and Buyer agrees to hold Seller harmless for any injury or injuries or claim based upon an injury or alleged injury that may happen to an employee or employees of the Buyer or to anyone else in connection with Buyer's handling of said anti-knock compound and/or process of manufacturing and/or distribution of said treated gasoline, except in cases of proven negligence on the part of the Seller or its legal representatives.

IV. DELAYS IN SHIPMENTS

In case shipment of the said anti-knock compound ordered by Buyer shall at any time be delayed no liability for damage shall arise against Seller on account thereof. However, if the delay shall result from a lack of sufficient quantity on hand to enable Seller to make shipments to all licensees pursuant to their orders, Seller agrees in that event to use its best effort in allocating to Buyer such proportion of the available anti-knock compound as Buyer's orders bear to the total orders of all licensees.

V. STANDARDIZATION (FOR USE IN AUTOMOBILES)

The amount of said anti-knock compound to be added to Buyer's said gasoline shall be an amount--as determined by the present A.S.T.M. procedure (D357-33T)--to make the resultant product manufactured under this agreement have at the time of sale to the consumer an anti-knock value of not more than seventy (70) octane number, except by the written consent of the Seller.

The parties agree that said anti-knock compound shall not be mixed or sold with any gasoline that does not at least conform to the following specifications:

A. Distillation:-

From April 1st to October 1st, to wit:

Not less than 10% evaporated at 158 degrees Fahrenheit.
Not less than 50% evaporated at 284 degrees Fahrenheit.
Not less than 90% evaporated at 392 degrees Fahrenheit.

From October 1st to April 1st, to wit:

Not less than 10% evaporated at 149 degrees Fahrenheit.
Not less than 50% evaporated at 284 degrees Fahrenheit.
Not less than 90% evaporated at 392 degrees Fahrenheit.

Residue shall not be more than 2%.

B. Sulphur: -

Sulphur content shall not be more than 0.10%.

C. Corrosion: -

A clean copper strip shall not show more than extremely slight discoloration when submerged in the gasoline for 3 hours at 122 degrees Fahrenheit.

D. Gum:--

The parties hereto appreciate that improperly refined gasoline may contain gum-forming substances in sufficient amount to interfere with the proper operation of an internal combustion motor, and Buyer agrees that it will use due diligence to prevent the mixing of said anti-knock compound with such gasoline.

The maximum content of said tetraethyl lead shall be three (3) cubic centimeters per U.S. Gallon of gasoline treated.

Buyer will be responsible for the quality of said treated gasoline and guarantees to maintain the standards of quality and restrictions on tetraethyl lead content hereinbefore laid down.

Buyer agrees to submit to Seller's laboratory samples of said treated gasoline from time to time on request.

Buyer will not sell said gasoline for use in aircraft except in emergency circumstances.

VI. NAME OF PRODUCT

Buyer will not use the Ethyl trade-mark or design or the "Q" trade-mark or design or the name of the Ethyl Gasoline Corporation, or the word "Ethyl" or "Q" either alone or in combination with any other name, word or words or design, in the sale, offering for sale, and advertising of said treated gasoline under this license. Furthermore, if any purchaser for resale as herein stated fails to comply with this provision, then Buyer will discontinue the sale of said gasoline to such purchaser.

VII. COLOR

Buyer agrees that gasoline manufactured under this license shall be colored

VIII. DEFENSES AGAINST CLAIMS OF INFRINGEMENT OF TRADE-MARKS AND PATENTS

(a) Seller agrees, at its own expense, to defend Buyer and/or its customers in any action or actions that may be brought alleging that the use and/or sale in Buyer's gasoline of the anti-knock compound so supplied by Seller infringes any Letters Patent of the United States; and Seller agrees to pay any and all judgments for damages or profits arising out of such litigation that may be assessed against Buyer and/or its customers, thereby saving them harmless therefrom; all provided, however, that Seller shall be given prompt notice of any claim of infringement and is permitted to take full charge of the defense of any such suit or suits.

(b) It is agreed that Seller shall at all times have the right to substitute for its said "Q" Brand and/or the design or

manner of its use, another brand or design if in Seller's judgm said change be necessary to avoid adverse claims for trade-mark infringement.

IX. TRANSFORM "Q" TO "ETHYL" BRAND

Seller hereby licenses Buyer to transform said "Q" Brand of Anti-Knock Compound into Ethyl Brand of Anti-Knock Compound, in accordance with such regulations as may be established from tim to time by Seller, whereupon said Ethyl Brand of Anti-Knock Compound shall become subject to all the requirements of the License and Sales Agreement dated , between Seller and Buyer relating to the use and mixing of Ethyl Brand of Anti-knock Compound with gasoline to produce Ethyl Gasoline.

X. TERM AND TERMINATION OF CONTRACT

The term of this license shall extend to December 31, 1939, and indefinitely thereafter, subject, however, to the rights of cancellation as follows:

(a) Either party may at any time cancel this license agreement for failure of the other party to comply with any of its terms and conditions by serving written notice on the other of election so to do.

(b) Either party shall have the right to terminate this License and Sales Agreement, or any revision thereof, at any tim on giving the other party three (3) months' notice in writing to that effect.

(c) Without prejudice to any of Seller's rights aforementioned, in the event the License and Sales Agreement between parties hereto for the manufacture of Ethyl Gasoline, dated , shall terminate, then this agreement shall automatically terminate as of the same date.

(d) Without waiving or restricting in any manner any of Seller's rights set forth in this instrument, the Seller shall have the right at any time, on giving Buyer three (3) months' notice in writing to that effect, to substitute for this a new form of Liconse and Sales Agreement containing such changes and additions hereto as it may deem expedient, and same to become effective at the end of said three (3) months.

(e) Notice to either party under any provision of this license shall be deemed good and sufficient if sent by registered mail to the last known post office address of such party.

(f) Upon the termination of this agreement or any revision thereof, Buyer agrees to discontinue the use of said "Q" Brand of Anti-Knock Compound and the sale of gasoline containing the same.

XI. CONTRACT TO CONSTITUTE WHOLE AGREEMENT

Any license mentioned herein is and shall be non-exclusive, and this instrument embodies the whole contract between the parties. No change, addition or erasures of any printed portion hereof (except the filling in of blank lines) shall be valid or binding upon either party, except as provided above. It is declared that there are no oral or other agreements or understandings between the parties affecting this agreement.

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This agreement supersedes all previous agreements relating to the subject matter hereof between Buyer and Seller, and constitutes a personal contract; and further relates only to the territory of the United States of America mentioned in the addendum. Buyer shall not transfer or assign this agreement or any part hereof, without Seller's written consent.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

ttest:

ETHYL GASOLINE CORPORATION

By

Secretary President

ttest:

By

Secretary President

ADDENDUM

TERRITORY:

State of..

Form LE 37

EXHIBIT 9-B

ETHYL GASOLINE CORPORATION

LICENSE AND SALES AGREEMENT

THIS AGREEMENT, made in duplicate this
by and between ETHYL GASOLINE CORPORATION, a Delaware corporation, as Licensor (however, for the purpose of more easily distinguishing between it and Licensee the Licensor will be referred to hereafter as Seller), and

a corporation, as Licensee (however, for the purpose of more easily distinguishing between it and Licensor, the Licensee will be referred to hereafter as Buyer).

WHEREAS, the Seller has been and is engaged in the devising and development of "ETHYL" Brand of Anti-Knock Compound (the basic ingredient of which is now tetraethyl lead) which is for use in small proportions with motor fuel to reduce and/or prevent knocking of internal combustion engines, and is the sole and exclusive licensee under certain patents therefor, namely, United States Patents Number 1,573,846 of February 23, 1926, and Number 1,668,022 of May 1, 1928, and Number 1,767,419 of December 30, 1930, among others; and

WHEREAS, Buyer is engaged in the business of refining and selling gasoline and desires to sell during the continuance of this agreement a gasoline which is of high quality, and for this purpose is desirous of purchasing said anti-knock compound from Seller and obtaining from it a license under said patents to mix said anti-knock compound with gasoline (thereby manufacturing under said patents the resultant product known and sometimes hereafter referred to as Ethyl Gasoline) and to sell same; and

WHEREAS, the Surgeon General of the United States Public Health Service has promulgated certain rules and regulations to be observed in connection with the handling and mixing of the said anti-knock compound with gasoline and the distribution, use and consumption of the gasoline when treated with said anti-knock compound; and

WHEREAS, the parties hereto recognize that the purposes set forth in the preceding paragraphs can be effected only if proper precautions and care are used in the manufacture, distribution, use and consumption of gasoline treated with said anti-knock compound, and desire that the business contemplated being done under this license shall be conducted in accordance with the rules so promulgated and/or recommended by the Surgeon General of the United States Public Health Service and such other rules as may be now in existence or hereafter issued from time to time by that office, the Department of Health of the State and/or Municipality wherein such manufacture and/or sale is or are conducted, and any other governmental agency having jurisdiction in the premises, and with such care as to reduce to a minimum any possible risk of injury and exposure to employees and the public.

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NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That in consideration of the premises and of the covenants and agreements hereinafter set forth, said parties agree as follows:

I. LICENSE Seller hereby licenses Buyer to manufacture said Ethyl Gasoline in the United States of America at the following points:

and to sell and deliver same in the territory of the United States of America mentioned in the addendum hereto, in the following manner, and not otherwise:

(a) To oil companies holding a license from Seller to manufacture gasoline containing said anti-knock compound, on condition, however, that the said product will be resold--whether directly or indirectly--under the brand name of the purchasing licensee and that both the vendor and purchaser thereof guarantee that it at least conforms to the standard of quality as herein specified. The Seller hereby reserves the right to cancel this provision (sub-division "(a)" of Clause "I") on giving ninety (90) days' notice in writing to that effect to Buyer; and

(b) To oil refining companies holding a license from Seller to sell (but not manufacture) Ethyl Gasoline; and

(c) To jobbers who hold a license from Seller to sell Ethyl Gasoline.

(d) To actual users or consumers thereof, and in less than tank car lots directly to retail dealers for delivery directly to said dealers to users and consumers thereof.

(e) At net prices (whether in barge, tank car, tank wagon, or otherwise), for sales to jobbers (coming within paragraph "(c)" above) not less than one and one-quarter (1.25) cents per U.S. Gallon for sales to retail dealers (coming within paragraph "(d)" above) not less than one and five-tenths (1.5) cents per U.S. Gallon, for sales to actual users and consumers (coming within paragraph "(d)" above) not less than two (2) cents per U.S. Gallon, above the average net sale price of licensee's best (non-premium) grade of commercial gasoline, for substantially the same time, locality, quantity and condition.

It is understood that the above provision as to price has no reference to the resale price of said product after it shall have been sold by the Buyer herein--the manufacturer of said treated gasoline under said patent and/or patents.

(f) Buyer will furnish Seller from time to time, upon written request therefor, a list containing the points at which and the purchasers to whom gasoline treated with said anti-knock compound is sold by it within subdivisions "(a)", "(b)" and "(c)" above.

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Buyer agrees to discontinue deliveries of Ethyl Gasoline to any licensee referred to in said subdivision "(a)", "(b)" and "(c)", immediately upon written notice to Buyer by Seller of the revocation of such licensee's license.

It is understood between the parties that "gasoline" includes any motor fuel; "anti-knock compound" refers to "ETHYL" brand of Anti-Knock Compound, and "treated gasoline" means any gasoline or motor fuel with which the "ETHYL" Brand of Anti-Knock Compound is mixed, wherever same any appear in this agreement.

II. PURCHASE AND SALE OF ANTI-KNOCK COMPOUND

Seller agrees to sell to Buyer said anti-knock compound on orders received therefor, in suitable drums (containing not less than 50 U.S. Gallons of said anti-knock compound), or in tank trucks or tank cars, f.o.b. Seller's plant, but on shipments made in Seller's tank cars Seller will, effective January 1, 1937, prepay and absorb the freight from Seller's plant to destination, and on shipments made in Seller's tank trucks, Seller will, effective January 1, 1937, absorb the cost of delivery from Seller's plant to destination, with the understanding that Seller reserves the right to refuse to make tank truck deliveries whenever in Seller's opinion same are not practical and within a reasonable trucking distance from its plant, on the following terms:

Effective on the signing of this agreement and during the period in the year 1937 that this agreement shall be in existence, the Seller agrees to sell and Buyer to pay Seller for all shipments of said anti-knock compound the sum of nine dollars and eighty-four and one-tenths cents ($9.841) per U.S.Gallon of commercially pure tetraethyl lead contained therein (which is equivalent to twenty-six one-hundredths (26/100) of a cent per cubic centimeter of commercially pure tetraethyl lead). Payment for said tetraethyl lead is to be made net cash within thirty (30) days after shipment.

Buyer shall pay Seller ten dollars ($10) for each drum in which said anti-knock compound is shipped and shall return the drums within thirty (30) days after they are emptied to Seller, freight collect, at such place or places as Seller may from time to time designate, and Seller shall pay Buyer ten dollars ($10) for each such drum so returned in as good condition as received by Buyer, ordinary wear and tear excepted.

III. HEALTH REQUIREMENTS RELATIVE TO HANDLING AND MIXING ETHYL FLUID AND DISTRIBUTION OF GASOLINE CONTAINING IT

(a) The mixing of said anti-knock compound with gasoline shall be done at the refinery or refineries of the Buyer, except for the existence of extraordinary circumstances, and then only upon the express written approval of Seller. The type and construction of the equipment and system employed for mixing shall in all cases meet with the approval of Seller.

(b) Buyer agrees that it will carry out the handling and mixing of said compound with gasoline and the distribution and sale of the treated gasoline in accordance with the rules and regulations now in existence or which may be hereafter issued from time

to time by the Seller, or the office of the Surgeon General of the United States Public Health Service, the Department of Health of the State and/or Municipality wherein the mixing i. ions and the sales and distribution take place, and any other governmental agency having jurisdiction in the premises, and that it will have its employees properly instructed in respect to said rules and regulations.

(c) Buyer agrees that whenever it sells said treated gasoline for resale it will obligate the purchaser to comply with the provisions of the preceding paragraphs insofar as such provisions may apply to health measures in connection with its distribution and sale, and will supply the purchaser with notices giving information, instructions and rules for the guidance of employees and the public. In making such sales Buyer agrees to reserve the right to and will cancel such contract or contracts of sale in the event the purchaser or purchasers do not comply with any of the said requirements. Further, Buyer will require the said purchaser or purchasers to impose similar obligations for any and all subsequent sales of the said gasoline for resale, including the reserved right of cancellation and agreement to cancel for failure to comply.

(d) Medical and mechanical representatives of Seller shall be afforded every reasonable facility to inspect any of the apparatus, equipment or other property used by Buyer and the system employed by it, in connection with the handling of said anti-knock compound, and the manufacture, distribution and sale of said gasoline. Buyer agrees to carry out and make the changes and/or repairs as such inspectors may from time to time reasonably require. Buyer agrees to permit the medical representatives of Seller to examine anyone under the control of Buyer whose work may have exposed him to the said anti-knock compound or to said treated gasoline, at any reasonable time said representatives may desire, and to follow all reasonable recommendations of such representatives as to observation, care and treatment of such persons. It is agreed Seller assumes no responsibility for or by reason of the issuance, promulgation or following of such rules, regulations and recommendations, nor as a result of such inspection and/or changes and repairs made as required by Seller, and Buyer agrees to hold Seller harmless for any injury or injuries or claim based upon an injury or alleged injury that may happen to an employee or employee of the Buyer or to anyone else in connection with Buyer's handling of said anti-knock compound and/or process of manufacturing and/or distribution of said treated gasoline, except in cases of proven negligence on the part of the Seller or its legal representatives.

IV. DELAYS IN SHIPMENTS

In case shipment of the said anti-knock compound ordered by Buyer shall at any time be delayed no liability for damage shall arise against Seller on account thereof. However, if the delay shall result from a lack of sufficient quantity on hand to enable Seller to make shipments to all licensees pursuant to their orders Seller agrees in that event to use its best effort in allocating to Buyer such proportion of the available anti-knock compound as Buyer's orders bear to the total orders of all licensees.

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V. STANDARDIZATION (FOR USE IN AUTOMOBILES)

The amount of "ETHYL" fluid to be added to Buyer's gasoline shall be at least sufficient--as determined by Seller's laboratory--to make it equal in anti-knock value to the standard Ethyl Gasoline as fixed by Seller. A reasonable number of samples of said standard will be supplied Buyer on request.

The method of determining the amount of "ETHYL" fluid to be added to Buyer's gasoline shall be the present A.S.T.M. procedure (D357-33T).

The parties hereto recognize that it would be detrimental to the good will in and reputation of said compound if it were used in gasoline not conforming to certain standard of quality, and the parties therefore agree that the said anti-knock compound shall not be mixed or sold with any gasoline that does not have the following distillation characteristics:

From April 1st to October 1st, to wit:

Not less than 10% evaporated at 158 degrees Fahrenheit.
Not less than 50% evaporated at 284 degrees Fahrenheit.
Not less than 90% evaporated at 392 degrees Fahrenheit.

From October 1st to April 1st, to wit:

Not less than 10% evaporated at 149 degrees Fahrenheit.
Not less than 50% evaporated at 284 degrees Fahrenheit.
Not less than 90% evaporated at 392 degrees Fahrenheit.

Residue shall not be more than 2%.

Sulphur content shall not be more than 0.10%.

Corrosion: A clean copper strip shall not show more than extremely slight discoloration when submerged in the gasoline for 3 hours at 122 degrees Fahrenheit.

Gum: The parties hereto appreciate that improperly refined gasoline may contain gum-forming substances in sufficient amount to interfere with the proper operation of an internal combustion motor, and Buyer agrees that it will use due diligence to prevent the mixing of "ETHYL" fluid with such gasoline. In the event the Seller shall determine from samples of such gasoline as may be submitted by Buyer for blending with "ETHYL" fluid that by reason of gum content it would be detrimental to the reputation of said anti-knock compound to treat such grade of gasoline with "ETHYL" fluid, then such decision shall be accepted by the Buyer as final.

The parties recognize that it may be expedient to change Seller's standard of quality and/or methods of test from time to time to keep abreast of advances in the art of refining and/or automotive engineering, and therefore the Seller reserves the right to make changes at any time upon giving ninety (90) days' written notice in advance to Buyer.

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In order to insure that the Ethyl Gasoline manufactured by the Buyer under this license conforms to at least the minimum requirements of this agreement, the following procedure shall be followed in reference to each and every individual proposed mixture of said anti-knock compound with Buyer's gasoline (unless written exception may have been made by Seller because of the existence of unusual circumstances) to wit:

1. Buyer shall send to Seller's laboratory a sample of the base stock proposed to be mixed by Buyer.

2. Seller's laboratory shall test it and its determination shall be accepted as final by Buyer.

3. If Seller reports that the sample is a gasoline meeting its requirements as a base stock for mixture with said "ETHYL" fluid, then Buyer will mix at least the amount of tetraethyl lead per gallon of gasoline so found to be required by Seller's laboratory.

4. Buyer will then send to Seller's laboratory a sample of the product so mixed, and agrees not to deliver any part of said mixture until it has received information from Seller that it meets the above specifications.

Buyer also agrees to use its best endeavors to insure that all Ethyl Gasoline sold by it and delivered to the consumer directly or through resellers, shall conform to a standard of quality at least equal to said specifications, and will not make further deliveries to any reseller in whose possession the said product is found not to conform to said specifications, unless an explanation satisfactory to Seller shall be made in writing by said reseller.

The minimum content of tetraethyl lead in said Ethyl Gasoline manufactured and/or sold by the Buyer hereunder shall be in the proportion of 1 to 4206 by volume for commercially pure tetraethyl lead (which is equal to nine-tenths (9/10) of a cubic centimeter of tetraethyl lead per U.S. Gallon of gasoline) and the maximum content of said tetraethyl lead in a U.S. Gallon of gasoline shall be in the proportion of 1 to 1260 by volume (which is equal to three (3) cubic centimeters of tetraethyl lead per U.S. Gallon of gasoline).

The parties hereto appreciate that gasoline for use in aircraft should have certain characteristics different from those for use in automobile motors of today and that it might be detrimental to the good will in and reputation of said anti-knock compound if the minimum standard referred to in this clause "(V)" should be used in aircraft motors. It is, therefore, agreed that the Buyer will not sell said gasoline for use in aircraft except under emergency circumstances.

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AME OF UCT.

Buyer agrees that in selling, offering for sale and/or advertising gasoline treated with said anti-knock compound it will apply to said gasoline the name Ethyl Gasoline with the registered trade-mark design and name of Seller connected therewith and in a form satisfactory to Seller (except in sales referred to in subdivision "(a)" of Clause " I ", and as may otherwise be granted in writing by Seller) and will obligate purchasers for resale to conform to this requirement.

Buyer agrees that in selling to oil refining companies and jobbers (who are licensed by Seller as contemplated in subdivisions "(a)", "(b)" and"(c)" of Clause " I ") it will reserve the right under such contract or contracts of sale, to and will cancel same, and will not make delivery of any of said treated gasoline to any such licensee upon receipt of written notice from Seller of the revocation of the license.

BUYER'S ATION TO OP ESS

Buyer agrees that it will advertise and diligently push the use and sale of Ethyl Gasoline.

DEFENSES AIMS OF NGEMENT ADE-MARKS ATENTS

(a) Buyer recognizes the validity of all Letters Patent relating to the said anti-knock compound and its use of which Seller is now or may be within the terms of this contract the sole and exclusive licensee, and agrees, during the period of this License Agreement, not to engage in such practices as may infringe the Seller's patent rights, as aforesaid.

(b) Seller agrees, at its own expense, to defend Buyer and/or its customers in any action or actions that may be brought alleging that the use and/or sale in Buyer's gasoline of the anti-knock compound so supplied by Seller infringes any Letters Patent of the United States; and Seller agrees to pay any and all judgments for damages or profits arising out of such litigation that may be assessed against Buyer and/or its customers, thereby saving them harmless therefrom; all provided, however, that Seller shall be given prompt notice of any claim of infringement and is permitted to take full charge of the defense of any such suit or suits.

(c) Seller agrees to assume any and all responsibility for trade-mark, label or analogous infringement, including rights relating to unfair competition, with which Buyer or those to whom it sells for resale may be charged for employing in their advertisements the trade-marks of Seller, and Seller will, at its own expense, defend any or all litigation based on the use of such trade-marks and pay any judgment or judgments that may be awarded to the plaintiff in the premises or the amount of any settlement therein, if settlement be made by Seller, all provided Seller is promptly notified of such claim and permitted to have full control of defending same.

IX. TERM AND TERMINATION OF CONTRACT

The term of this license shall extend to December 31, 1937, and indefinitely thereafter, subject, however, to the rights of cancellation as follows:

(a) Either party may at any time cancel this license agreement for failure of the other party to comply with any of its terms and conditions by serving written notice on the other of its election so to do.

(b) Without waiving any of Seller's rights set forth in this instrument, the Seller shall have the right in October of any year to substitute for this a new form of License and Sales Agreement containing such changes and/or additions hereto as it may deem expedient, and same to become effective at the end of the following December; or it may in October of any year notify in writing the Buyer of any such changes and/or additions to this instrument, which when accepted by Buyer shall have the same force and effect--commencing as of the end of the following December--as if embodied in a new form of License and Sales Agreement; provided, however, that such changes and/or additions (whether included in a new form or evidenced by written notice from Seller to Buyer) do not impair the obligations of the Seller as set forth in Clause VIII, entitled "Defenses of Claims of Infringement of Trade-Marks and Patents", and are to apply for general use with other licensees in the United States of America holding a form of license similar to this (being Form DZ 37). If Buyer shall not indicate acceptance of such changes and/or additions within sixty (60) days after receipt of notice thereof from Seller (in the event such changes and/or additions are not embodied in a formal document) then this License and Sales Agreement shall immediately become null and void.

(c) The Buyer shall have the right (with or without cause) to terminate this License and Sales Agreement, or any revision thereof, at any time on giving Seller one hundred and eighty (180) days' notice in writing to that effect, and Seller shall have the right (with or without cause) to terminate this License and Sales Agreement, or any revision thereof, at any time after December 31, 1937, on giving to Buyer twelve (12) months' notice in writing to that effect.

(d) Notice to either party under any provision of this license shall be deemed good and sufficient if sent by registered mail to the last known post office address of such party.

(e) Upon the termination of this agreement or any revision and/or renewal thereof, Buyer agrees to discontinue the sale and/or advertisement for sale of gasoline containing any of said anti-knock compound, and the use of the name Ethyl or Ethyl Gasoline in any manner, and also the use of any trade-mark design or trade name belonging to or controlled by Seller.

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. CONTRACT. O CONSTITUTE HOLE GREEMENT

Any license mentioned herein is and shall be non-exclusive, and this instrument embodies the whole contract between the parties. No change, addition or erasures of any printed portion hereof (except the filling in of blank lines) shall be valid or binding upon either party, except as provided above. It is declared that there are no oral or other agreements or understandings between the parties affecting this agreement.

This agreement supersedes all previous agreements relating to the subject matter hereof between Buyer and Seller and/or between Buyer and Seller's assignor, the General Motors Chemical Company; and further, constitutes a personal contract. Buyer shall not transfer or assign same or any part hereof nor shall Buyer sell or offer for sale Ethyl Gasoline to any person, firm or corporation by means of brokerage or other than through Buyer's own organization, without Seller's written consent.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

ttest:

ETHYL GASOLINE CORPORATION

By

Secretary

President

ttest:

By

Secretary

President

45

EXHIBIT 9-A

Refiners License Agreement

NON-MANUFACTURING

ETHYL GASOLINE CORPORATION

WITH

.....

.....

Dated .....

Form "Ethyl E"

ETHYL GASOLINE CORPORATION

Refiners License Agreement

(NON-MANUFACTURING)

THIS AGREEMENT, made in duplicate this ..... day of ....., 19..... by and between ETHYL GASOLINE CORPORATION, a Delaware corporation, hereinafter called the LICENSOR, and

a {individual / co-partnership / corporation} .....

hereinafter called the LICENSEE:

WHEREAS, the Licensor has been and is engaged in the devising and development of "ETHYL" Brand of Anti-Knock Compound (the basic ingredient of which is now tetraethyl lead) which is being and is intended to be added in small proportion to gasoline to reduce and/or prevent knocking of internal combustion engines, and is the sole and exclusive licensee under certain patents therefor, namely, United States Patents Number 1,573,846 of February 23, 1926, and Number 1,668,022 of May 1, 1928; and

WHEREAS, the Licensee is engaged in the business of refining and selling gasoline and intends to sell during the continuance of this agreement a gasoline which is of high quality, and for this purpose is desirous of obtaining a license under said patents to sell and deliver said gasoline when treated with the said anti-knock compound (hereafter referred to as Ethyl Gasoline); and

WHEREAS, the Surgeon General of the United States Public Health Service has promulgated certain rules and regulations to be observed in connection with the handling, transportation, use, and distribution of gasoline when treated with said anti-knock compound; and

WHEREAS, the parties hereto recognize that the purposes set forth in the preceding paragraphs can be effected only if proper precautions and care are used in the distribution, use and consumption of gasoline treated with said anti-knock compound, and desire that the business contemplated being done under this license shall be conducted in accordance with the rules so promulgated and/or recommended by the Surgeon General of the United States Public Health Service and such other rules as may be now in existence or hereafter issued from time to time by that office, and any other governmental agency having jurisdiction in the premises, and with such care as to reduce to a minimum any possible risk of injury and exposure to employees and the public.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That in consideration of the premises and of the covenants and agreements hereinafter set forth, said parties agree as follows:

1. LICENSE Licensor hereby licenses Licensee to sell and deliver Ethyl Gasoline in the territory of the United States of America mentioned in the addendum hereto, in the following manner, and not otherwise:

(a) To those who hold a license from Licensor to sell (but not manufacture) Ethyl Gasoline.

(b) To actual users or consumers thereof, and in less than tank car lots to retail dealers for delivery directly by said dealers to users and consumers thereof.

(c) Licensee agrees that it will supply to Licensor upon written request therefor, a list, revised monthly, of all points at which Ethyl Gasoline is sold by it as contemplated in paragraphs "a" and "b" and the amount thereof, and also a list of those purchasing in tank car lots.

Licensee agrees to discontinue deliveries to any purchaser, referred to in said subdivision "a", immediately upon notice by Licensor of the revocation of such purchaser's license.

It is understood between the parties that "gasoline" includes any motor fuel; "anti-knock compound" refers to "ETHYL" Brand of Anti-Knock Compound, and "treated gasoline" means any gasoline or motor fuel with which the "ETHYL" Brand of Anti-Knock Compound is mixed, wherever same may appear in this agreement.

II. INSTRUCTIONS FOR (a) Licensee agrees to comply with all rules and regulations now in existence or which may be hereafter issued from time to time by the Licensor (it being understood that they will include those [illegible] Surgeon General of the United States Public Health Service), and any govern-

(c) Licensee agrees to permit a medical representative of Licensor to examine anyone under the control of Licensee whose work is apt to or may have exposed him to the said gasoline, at any reasonable time said representative may desire, and to carry out the recommendations of such representative.

(d) Licensee agrees that whenever it sells such gasoline for resale it will obligate the purchaser to comply with the provisions of paragraphs (a), (b) and (c) immediately preceding. In making such sales the Licensee agrees to reserve the right to and will cancel such contract or contracts of sale in the event the purchaser or purchasers do not comply with any of the said requirements.

III. STANDARDIZATION

Licensee recognizes that it would be detrimental to the good will in and reputation of gasoline containing said compound sold under the ETHYL trade-mark if it does not conform to a certain standard of quality established from time to time by the Licensor. Therefore, the Licensee agrees not to adulterate or modify or permit to be adulterated or modified said gasoline distributed pursuant to this license, and will not sell or offer for sale any gasoline claimed or reputed to be ETHYL Gasoline which in any manner does not conform at least to the minimum standard so established by Licensor. Further, whenever Licensee sells said gasoline for resale it will obligate the purchaser to comply with the terms of this clause entitled "Standardization", and will reserve the right to cancel its contract of sale for breach of such clause.

The parties hereto appreciate that gasoline for use in aircraft should have certain characteristics different from those for use in automobile motors of today and that it might be detrimental to the good will in and the reputation of said anti-knock compound if gasoline with which said anti-knock compound has been mixed for use in automobile motors should be used for aviation purposes. Licensee therefore agrees not to sell or offer for sale for use in aircraft motors gasoline containing said anti-knock compound designed primarily for use in automobile motors, except under emergency circumstances.

IV. NAME OF PRODUCT

Licensee agrees that in selling, offering for sale and/or advertising gasoline treated with said anti-knock compound it will apply to said gasoline the name ..... Ethyl Gasoline with the registered trade-mark design and name of Licensor connected therewith and in a form satisfactory to Licensor, and will obligate purchasers for resale to conform to this requirement.

If any purchaser for resale as herein stated fails to comply with this provision, then Licensee will discontinue the sale of gasoline treated with said anti-knock compound to such purchaser.

V. LICENSEE'S OBLIGATION TO DEVELOP BUSINESS

Licensee agrees that it will advertise and diligently push the use and sale of ..... Ethyl Gasoline.

If Licensee has been selling Ethyl Gasoline for the past six months and shall fail, so long as this agreement shall be in existence, (1) to sell Ethyl Gasoline continuously after November 1, 1930 in any state wherein Licensee is then or thereafter marketing Ethyl Gasoline and one or more other premium priced gasolines (exclusive of gasoline for aviation) from at least one-half as many of Licensee's owned and otherwise controlled filling stations therein and from which Licensee is distributing such non-ETHYL premium gasoline, and (2) by and through at least one-quarter of as many of Licensee's dealers as may be handling its non-ETHYL premium gasoline therein, and (3) to at least expend each year in advertising Ethyl Gasoline in such state an amount which shall be in proportion to the total expended by the Licensee in advertising all brands of premium priced gasoline therein as the total sales of gallons of Ethyl Gasoline by the Licensee therein bear to the total sales of gallons of all brands of premium priced gasoline by the Licensee during the year; then Licensor shall have the right to determine that such failure constitutes a breach of Licensee's obligation to push the use and sale of Ethyl Gasoline, and Licensor may at any time cancel this License Agreement by reason thereof if such default is not rectified within ninety (90) days after written notice given by Licensor to Licensee.

If Licensee has not been selling Ethyl Gasoline for the past six months, and so long as this agreement shall be in existence, shall fail (1) to sell Ethyl Gasoline continuously after the expiration of six (6) months from the date of this agreement in any state wherein Licensee is then or thereafter marketing Ethyl Gasoline and one or more other premium priced gasolines (exclusive of gasoline for aviation) from at least one-half as many of Licensee's owned and otherwise controlled filling stations therein and from which Licensee is distributing such non-ETHYL premium gasoline, and (2) by and through at least one-quarter of as many of Licensee's dealers as may be handling its non-ETHYL premium gasoline therein, and (3) to at least expend each year in advertising Ethyl Gasoline in such state an amount which shall be in proportion to the total expended by the Licensee in advertising all brands of premium priced gasoline therein as the total sales of gallons of Ethyl Gasoline by the Licensee therein bear to the total sales of gallons of all brands of premium priced gasoline by the Licensee during the year, then Licensor shall have the right to determine that such failure constitutes a breach of Licensee's obligation to push the use and sale of Ethyl Gasoline, and Licensor may at any time cancel this License Agreement by reason thereof if such default is not rectified within ninety (90) days after written notice given by Licensor to Licensee.

(The word "dealer" as used in this Clause (V) means one who buys in tank wagon lots for resale.)

It is understood and agreed that the sale of Ethyl Gasoline by and through the minimum number of stations and dealers and the expenditure for advertising as set forth in the two preceding paragraphs shall not of itself be evidence of compliance with the obligation to push the use and sale of Ethyl Gasoline, as it is recognized by the parties hereto that there are other ways and means by

which in any manner does not conform in respect to the minimum standards ... Further, whenever Licensee sells said gasoline for resale it will obligate the purchaser to comply with the terms of this clause entitled "Standardization", and will reserve the right to cancel its contract of sale for breach of such clause.

The parties hereto appreciate that gasoline for use in aircraft should have certain characteristics different from those for use in automobile motors of today and that it might be detrimental to the good will in and the reputation of said anti-knock compound if gasoline with which said anti-knock compound has been mixed for use in automobile motors should be used for aviation purposes. Licensee therefore agrees not to sell or offer for sale for use in aircraft motors gasoline containing said anti-knock compound designed primarily for use in automobile motors, except under emergency circumstances.

IV. NAME OF PRODUCT

Licensee agrees that in selling, offering for sale and/or advertising gasoline treated with said anti-knock compound it will apply to said gasoline the name ..... Ethyl Gasoline with the registered trade-mark design and name of Licensor connected therewith and in a form satisfactory to Licensor, and will obligate purchasers for resale to conform to this requirement.

If any purchaser for resale as herein stated fails to comply with this provision, then Licensee will discontinue the sale of gasoline treated with said anti-knock compound to such purchaser.

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If Licensee has been selling Ethyl Gasoline for the past six months and shall fail, so long as this agreement shall be in existence, (1) to sell Ethyl Gasoline continuously after November 1, 1930 in any state wherein Licensee is then or thereafter marketing Ethyl Gasoline and one or more other premium priced gasolines (exclusive of gasoline for aviation) from at least one-half as many of Licensee's owned and otherwise controlled filling stations therein and from which Licensee is distributing such non-ETHYL premium gasoline, and (2) by and through at least one-quarter of as many of Licensee's dealers as may be handling its non-ETHYL premium gasoline therein, and (3) to at least expend each year in advertising Ethyl Gasoline in such state an amount which shall be in proportion to the total expended by the Licensee in advertising all brands of premium priced gasoline therein as the total sales of gallons of Ethyl Gasoline by the Licensee therein bear to the total sales of gallons of all brands of premium priced gasoline by the Licensee during the year, then Licensor shall have the right to determine that such failure constitutes a breach of Licensee's obligation to push the use and sale of Ethyl Gasoline, and Licensor may at any time cancel this License Agreement by reason thereof if such default is not rectified within ninety (90) days after written notice given by Licensor to Licensee.

If Licensee has not been selling Ethyl Gasoline for the past six months, and so long as this agreement shall be in existence, shall fail (1) to sell Ethyl Gasoline continuously after the expiration of six (6) months from the date of this agreement in any state wherein Licensee is then or thereafter marketing Ethyl Gasoline and one or more other premium priced gasolines (exclusive of gasoline for aviation) from at least one-half as many of Licensee's owned and otherwise controlled filling stations therein and from which Licensee is distributing such non-ETHYL premium gasoline, and (2) by and through at least one-quarter of as many of Licensee's dealers as may be handling its non-ETHYL premium gasoline therein, and (3) to at least expend each year in advertising Ethyl Gasoline in such state an amount which shall be in proportion to the total expended by the Licensee in advertising all brands of premium priced gasoline therein as the total sales of gallons of Ethyl Gasoline by the Licensee therein bear to the total sales of gallons of all brands of premium priced gasoline by the Licensee during the year, then Licensor shall have the right to determine that such failure constitutes a breach of Licensee's obligation to push the use and sale of Ethyl Gasoline, and Licensor may at any time cancel this License Agreement by reason thereof if such default is not rectified within ninety (90) days after written notice given by Licensor to Licensee.

(The word "dealer" as used in this Clause (V) means one who buys in tank wagon lots for resale.)

It is understood and agreed that the sale of Ethyl Gasoline by and through the minimum number of stations and dealers and the expenditure for advertising as set forth in the two preceding paragraphs shall not of itself be evidence of compliance with the obligation to push the use and sale of Ethyl Gasoline, as it is recognized by the parties hereto that there are other ways and means by which Licensee might fail to comply with that obligation.

VI. TRADE-MARK AND PATENTS

(a) Licensee recognizes the validity of all Letters Patent relating to the said anti-knock compound and its use of which Licensor is the sole and exclusive Licensee, and agrees, during the period of this contract, not to engage in any such practices as may infringe the Licensor's patent rights as aforesaid.

(b) Licensor agrees to assume any and all responsibility for trade-mark, label or analogous infringement, including rights relating to unfair competition, with which Licensee or those to whom it sells for resale may be charged for employing in their advertisements the trade-mark of Licensor, and Licensor will, at its own expense, defend any or all ligitation based on the use of said word or words and pay any judgment or judgments that may be awarded to the plaintiff in the premises or the amount of any settlement therein, if settlement be made by Licensor, all provided Licensor is promptly notified of such claim and permitted to have full control of defending same.

(c) Licensor agrees, at its own expense, to defend Licensee and/or its customers in any action or actions that may be brought alleging that the use and/or sale of gasoline containing said anti-knock compound supplied by Licensor infringes any Letters Patent; and Licensor agrees to pay any and all judgments for damages or profits arising out of such litigation that may be assessed against Licensee and/or its customers, thereby saving them harmless therefor; all provided, however, that Licensor shall be given prompt notice of any claim of infringement and is permitted to take full charge of the defense of any such suit or suits.

VII. TERM AND TERMINATION OF CONTRACT

The term of this license shall extend to December 31, 1930, and indefinitely thereafter, subject, however, to the rights of cancellation as follows:

(a) Either party may at any time cancel this license agreement for failure of the other party to comply with any of its terms and conditions by serving written notice on the other of its election so to do.

(b) Either party shall have the right after December 31, 1930 (with or without cause) to terminate this License and Sales Agreement, or any revision thereof, by giving to the other party three (3) months written notice to that effect.

(c) Without waiving any of Licensor's rights set forth in this instrument, the Licensor shall have the right in July of any year to substitute for this a new form of License Agreement containing such changes and/or additions hereto as it may deem expedient, and same to become effective at the end of the following October; or it may in July of any year notify in writing the Licensee of any such changes and/or additions to this instrument, which when accepted by Licensee shall have the same force and effect—commencing as of the end of the following October—as if embodied in a new form of License Agreement; provided, however, that such changes and/or additions (whether included in a new form or evidenced by written notice from Licensor to Licensee) are to apply for general use with other licensees in the United States of America holding a similar form of license. If Licensee shall not indicate acceptance of any such new form by signing and returning same to Licensor within thirty (30) days after its receipt from Licensor, or if Licensee shall not give written notice to Licensor of acceptance of such changes and/or additions within thirty (30) days after receipt of notice thereof from Licensor (in the event such changes and/or additions are not embodied in a formal document) then this License Agreement shall immediately become null and void.

(d) Notice to either party under any provision of this license shall be deemed good and sufficient if sent by registered mail to the last known post office address of such party.

(e) Upon the termination of this agreement or any revision and/or renewal thereof, Licensee agrees to discontinue the sale and/or advertisement for sale of gasoline containing any of said anti-knock compound, and the use of the name Ethyl or Ethyl Gasoline in any manner, and also the use of any trade-mark design or trade name belonging to or controlled by Licensor.

VIII. CONTRACT TO CONSTITUTE WHOLE AGREEMENT

Any license mentioned herein is and shall be non-exclusive, and this instrument embodies the whole contract between the parties. No change, addition or erasures of any printed portion hereof (except the filling in of blank lines) shall be valid or binding upon either party, except as provided above. It is declared that there are no oral or other agreements or understandings between the parties affecting this agreement.

This agreement supersedes all previous agreements relating to the subject matter hereof between the parties hereto; and, further, constitutes a personal contract. Licensee shall not transfer or assign same or any part hereof nor shall Licensee sell or offer for sale Ethyl Gasoline to any person, firm or corporation by means of brokerage or other than through its own organization, without Licensor's written consent.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

ETHYL GASOLINE CORPORATION

Attest:

By .....

charge of the defense of any such suit or suits.

VII. TERM AND TERMINATION OF CONTRACT

The term of this license shall extend to December 31, 1930, and indefinitely thereafter, subject, however, to the rights of cancellation as follows:

(a) Either party may at any time cancel this license agreement for failure of the other party to comply with any of its terms and conditions by serving written notice on the other of its election so to do.

(b) Either party shall have the right after December 31, 1930 (with or without cause) to terminate this License and Sales Agreement, or any revision thereof, by giving to the other party three (3) months written notice to that effect.

(c) Without waiving any of Licensor's rights set forth in this instrument, the Licensor shall have the right in July of any year to substitute for this a new form of License Agreement containing such changes and/or additions hereto as it may deem expedient, and same to become effective at the end of the following October; or it may in July of any year notify in writing the Licensee of any such changes and/or additions to this instrument, which when accepted by Licensee shall have the same force and effect—commencing as of the end of the following October—as if embodied in a new form of License Agreement; provided, however, that such changes and/or additions (whether included in a new form or evidenced by written notice from Licensor to Licensee) are to apply for general use with other licensees in the United States of America holding a similar form of license. If Licensee shall not indicate acceptance of any such new form by signing and returning same to Licensor within thirty (30) days after its receipt from Licensor, or if Licensee shall not give written notice to Licensor of acceptance of such changes and/or additions within thirty (30) days after receipt of notice thereof from Licensor (in the event such changes and/or additions are not embodied in a formal document) then this License Agreement shall immediately become null and void.

(d) Notice to either party under any provision of this license shall be deemed good and sufficient if sent by registered mail to the last known post office address of such party.

(e) Upon the termination of this agreement or any revision and/or renewal thereof, Licensee agrees to discontinue the sale and/or advertisement for sale of gasoline containing any of said anti-knock compound, and the use of the name Ethyl or Ethyl Gasoline in any manner, and also the use of any trade-mark design or trade name belonging to or controlled by Licensor.

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Any license mentioned herein is and shall be non-exclusive, and this instrument embodies the whole contract between the parties. No change, addition or erasures of any printed portion hereof (except the filling in of blank lines) shall be valid or binding upon either party, except as provided above. It is declared that there are no oral or other agreements or understandings between the parties affecting this agreement.

This agreement supersedes all previous agreements relating to the subject matter hereof between the parties hereto; and, further, constitutes a personal contract. Licensee shall not transfer or assign same or any part hereof nor shall Licensee sell or offer for sale Ethyl Gasoline to any person, firm or corporation by means of brokerage or other than through its own organization without Licensor's written consent.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

ETHYL GASOLINE CORPORATION

Attest:

..... By .....

Secretary President

Attest:

..... By .....

Secretary President

50

Addendum

TERRITORY:

County of.....

.....

.....

.....

State of.....

.....

.....

.....

EXHIBIT 13-A

ETHYL GASOLINE CORPORATION

CHRYSLER BUILDING
135 EAST 42ND STREET
NEW YORK

RULES AND REGULATIONS

FOR DISTRIBUTION OF ETHYL GASOLINE
(NO MATTER UNDER WHAT NAME IT MAY BE SOLD)

1. Each filling station shall have prominently displayed at the pump the following warning:

"Contains
Lead

(Tetraethyl) and is to be used as motor fuel only, not for cleaning or any other use.
Avoid spilling."

2. Suitable leaflets shall be available at all filling stations where Ethyl Gasoline is sold, for distribution on request. These leaflets shall describe the possible dangers and precautions to be taken in the use of Ethyl Gasoline.

3. Containers of Ethyl Gasoline sold to the general public shall be labeled:

"Contains
Lead

(Tetraethyl) and is to be used as motor fuel only, not for cleaning or any other use.
Avoid spilling."

1. Do not use it in lamps or stoves or for cooking purposes of any kind.
2. Never use it for cleaning tools, machinery, clothing or hands.
3. Do not carelessly spill it.
4. Avoid spilling it on your clothing or skin.
5. In operations where skin contact is unavoidable, such as removing valves from cars for drainage of residual gasoline, it is recommended that soap and water be immediately used to wash the hands and arms wherever practicable. The use of waste or other absorbent material for the removal of gasoline from the skin is suggested as a second possibility.
6. Wash your hands before food, tobacco or anything else is conveyed to the mouth, after handling motor parts of the exhaust or fuel system of an automobile.

Motorists are reminded that there is danger involved in handling all kinds of motor fuel. When

RULES AND REGULATIONS

FOR DISTRIBUTION OF ETHYL GASOLINE (NO MATTER UNDER WHAT NAME IT MAY BE SOLD)

1. Each filling station shall have prominently displayed at the pump the following warning:

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2. Suitable leaflets shall be available at all filling stations where Ethyl Gasoline is sold, for distribution on request. These leaflets shall describe the possible dangers and precautions to be taken in the use of Ethyl Gasoline.

3. Containers of Ethyl Gasoline sold to the general public shall be labeled:

"Contains
Lead

(Tetraethyl) and is to be used as motor fuel only, not for cleaning or any other use.
Avoid spilling."

Ethyl Gasoline is intended and sold only as a motor fuel and not for the various other purposes for which ordinary gasoline is used; and in order to prevent possible misuse, you are advised:

1. Do not use it in lamps or stoves or for cooking purposes of any kind.
2. Never use it for cleaning tools, machinery, clothing or hands.
3. Do not carelessly spill it.
4. Avoid spilling it on your clothing or skin.
5. In operations where skin contact is unavoidable, such as removing valves from cars for drainage of residual gasoline, it is recommended that soap and water be immediately used to wash the hands and arms wherever practicable. The use of waste or other absorbent material for the removal of gasoline from the skin is suggested as a second possibility.
6. Wash your hands before food, tobacco or anything else is conveyed to the mouth, after handling motor parts of the exhaust or fuel system of an automobile.

Motorists are reminded that there is danger involved in handling all kinds of motor fuel. When breathed as vapor, or when absorbed through the skin in sufficient quantity, any kind of gasoline will produce serious results; and when allowed to remain in contact with the skin it frequently produces irritation and blistering.

(The Ethyl trademark design and name shall appear on each pump dispensing Ethyl Gasoline.)

"PRINTED IN U. S. A."

1941

ETHYL GASOLINE CORPORATION

Jobber License Agreement

THIS AGREEMENT, made in duplicate this.....day of.....193....., by and between ETHYL GASOLINE CORPORATION, a Delaware corporation, hereinafter called the LICENSOR, and

a { individual / co-partnership / corporation } .....

hereinafter called the LICENSEE:

WHEREAS, the Licensor has been and is engaged in devising and developing a certain "ETHYL" Brand of Anti-knock Compound (the basic ingredient of said anti knock compound being now tetraethyl lead) which is being and is intended to be added in small proportion to gasoline and other motor fuels to reduce and/or prevent knocking of internal combustion engines, and is the sole and exclusive licensee under certain patents therefor, namely, United States Patents Number 1,573,846 of February 23, 1926, and Number 1,668,022 of May 1, 1928; and Number 1,787,419 of December 30, 1930, among others; and

WHEREAS, the Licensee is engaged in the business of selling gasoline and intends to sell during the continuance of this agreement a gasoline which is of high quality, and for this purpose is desirous of obtaining a License, under said patents, to sell and deliver gasoline when treated with the said anti-knock compound; and

WHEREAS, the Surgeon General of the United States Public Health Service has promulgated certain rules and regulations to be observed in connection with the handling, transportation, use, consumption and distribution of gasoline treated with tetraethyl lead, and the parties hereto desire that the business contemplated being done under this license shall be conducted in accordance with such rules and with such care as to reduce to a minimum any possible risk of injury and exposure to employees and the public.

NOW, THEREFORE, in consideration of the premises and of the covenants and the agreements hereinafter set forth, the said parties agree as follows:

I. LICENSE

(a) Licensor hereby licenses Licensee to sell and deliver in the territory of the United States of America mentioned on the reverse side of this sheet, and not elsewhere, the improved motor fuel, defined in the aforesaid patents, in quantities less than tank car lots only, and only to users and consumers thereof or directly to retail dealers for delivery directly by said dealers to users and consumers thereof, on the condition, however, that the Licensee shall have purchased said improved motor fuel from a manufacturer holding a license from the Licensor under said patents.

(b) Licensee agrees that it will supply to Licensor a list, revised monthly, of all points at which motor fuel delivered under this License is sold as provided in Paragraph (a).

II. INSTRUCTIONS FOR HANDLING

(a) Licensee shall cause any notices giving information for the guidance of employees handling said treated gasoline and purchasers thereof, furnished it by Licensor or the refinery selling Licensee such gasoline, to be posted and/or distributed in accordance with the regulations hereinafter mentioned.

(b) Licensee agrees to acquaint itself and comply with all rules and regulations issued from time to time by Licensor and the office of the Surgeon General of the United States Public Health Service, the Department of Health of the State and/or Municipality wherein Licensee's business is carried on, and any other governmental agency having jurisdiction in the premises relative to the distribution and sale of gasoline containing said anti-knock compound.

(c) Licensee agrees to permit a medical representative of Licensor to examine anyone under the control of Licensee whose work is apt to or may have exposed him to the said gasoline, at any reasonable time said representative may desire, and to carry out the recommendations of such representative.

(d) Licensee agrees that whenever it sells such gasoline for resale, it will obligate the purchaser to comply with provisions of paragraphs (a), (b) and (c) immediately preceding, and will supply the purchaser with notices giving information, instructions and rules for the guidance of employees handling such gasoline and the purchasers thereof. In making such sales the Licensee agrees to reserve the right to and will cancel such contract or contracts of sale in the event the purchaser or purchasers do not comply with any of the said requirements.

III. STANDARDIZATION

Licensee recognizes that it would be detrimental to the good will in and reputation of gasoline containing said compound sold under the ETHYL trade-mark if it does not conform to a certain standard of quality established from time to time by the Licensor. Therefore, the Licensee agrees not to adulterate or modify or permit to be adulterated or modified said gasoline distributed pursuant to this license, and will not sell or offer for sale any gasoline claimed or reputed to be Ethyl Gasoline which in any manner does not conform at least to the minimum standard so established by Licensor. Further, whenever Licensee sells said gasoline for resale it will obligate the purchaser to comply with the terms of this clause entitled "Standardization," and will reserve the right to cancel its contract of sale for breach of such clause.

The parties hereto appreciate that gasoline for use in aircraft should have certain char-

a { individual / co-partnership / corporation } .....

hereinafter called the LICENSEE:

WHEREAS, the Licensor has been and is engaged in devising and developing a certain "ETHYL" Brand of Anti-knock Compound (the basic ingredient of said anti knock compound being now tetraethyl lead) which is being and is intended to be added in small proportion to gasoline and other motor fuels to reduce and/or prevent knocking of internal combustion engines, and is the sole and exclusive licensee under certain patents therefor, namely, United States Patents Number 1,573,846 of February 23, 1926, and Number 1,668,022 of May 1, 1928; and Number 1,787,419 of December 30, 1930, among others; and

WHEREAS, the Licensee is engaged in the business of selling gasoline and intends to sell during the continuance of this agreement a gasoline which is of high quality, and for this purpose is desirous of obtaining a License, under said patents, to sell and deliver gasoline when treated with the said anti-knock compound; and

WHEREAS, the Surgeon General of the United States Public Health Service has promulgated certain rules and regulations to be observed in connection with the handling, transportation, use, consumption and distribution of gasoline treated with tetraethyl lead, and the parties hereto desire that the business contemplated being done under this license shall be conducted in accordance with such rules and with such care as to reduce to a minimum any possible risk of injury and exposure to employees and the public.

NOW, THEREFORE, in consideration of the premises and of the covenants and the agreements hereinafter set forth, the said parties agree as follows:

I. LICENSE

(a) Licensor hereby licenses Licensee to sell and deliver in the territory of the United States of America mentioned on the reverse side of this sheet, and not elsewhere, the improved motor fuel, defined in the aforesaid patents, in quantities less than tank car lots only, and only to users and consumers thereof or directly to retail dealers for delivery directly by said dealers to users and consumers thereof, on the condition, however, that the Licensee shall have purchased said improved motor fuel from a manufacturer holding a license from the Licensor under said patents.

(b) Licensee agrees that it will supply to Licensor a list, revised monthly, of all points at which motor fuel delivered under this License is sold as provided in Paragraph (a).

II. INSTRUCTIONS FOR HANDLING

(a) Licensee shall cause any notices giving information for the guidance of employees handling said treated gasoline and purchasers thereof, furnished it by Licensor or the refinery selling Licensee such gasoline, to be posted and/or distributed in accordance with the regulations hereinafter mentioned.

(b) Licensee agrees to acquaint itself and comply with all rules and regulations issued from time to time by Licensor and the office of the Surgeon General of the United States Public Health Service, the Department of Health of the State and/or Municipality wherein Licensee's business is carried on, and any other governmental agency having jurisdiction in the premises relative to the distribution and sale of gasoline containing said anti-knock compound.

(c) Licensee agrees to permit a medical representative of Licensor to examine anyone under the control of Licensee whose work is apt to or may have exposed him to the said gasoline, at any reasonable time said representative may desire, and to carry out the recommendations of such representative.

(d) Licensee agrees that whenever it sells such gasoline for resale, it will obligate the purchaser to comply with provisions of paragraphs (a), (b) and (c) immediately preceding, and will supply the purchaser with notices giving information, instructions and rules for the guidance of employees handling such gasoline and the purchasers thereof. In making such sales the Licensee agrees to reserve the right to and will cancel such contract or contracts of sale in the event the purchaser or purchasers do not comply with any of the said requirements.

III. STANDARDIZATION

Licensee recognizes that it would be detrimental to the good will in and reputation of gasoline containing said compound sold under the ETHYL trade-mark if it does not conform to a certain standard of quality established from time to time by the Licensor. Therefore, the Licensee agrees not to adulterate or modify or permit to be adulterated or modified said gasoline distributed pursuant to this license, and will not sell or offer for sale any gasoline claimed or reputed to be Ethyl Gasoline which in any manner does not conform at least to the minimum standard so established by Licensor. Further, whenever Licensee sells said gasoline for resale it will obligate the purchaser to comply with the terms of this clause entitled "Standardization," and will reserve the right to cancel its contract of sale for breach of such clause.

The parties hereto appreciate that gasoline for use in aircraft should have certain characteristics different from those for use in automobile motors of today and that it might be detrimental to the good will in and reputation of said anti-knock compound if gasoline with which said anti-knock compound has been mixed for use in automobile motors should be used for aviation purposes. Licensee therefore agrees not to sell or offer for sale for use in aircraft motors gasoline containing said anti-knock compound designed primarily for use in automobile motors, except under emergency circumstances.

IV. LICENSEE'S OBLIGATION TO DEVELOP BUSINESS

1. Licensee agrees to diligently push the use and sale of gasoline treated with the said anti-knock compound—referred to as Ethyl Gasoline—and will furnish to Licensor, upon written request therefor, such record of sales as will correctly indicate its percentage of sales of Ethyl Gasoline relative to its total sales of gasoline from time to time, so as to afford a reasonable check on this provision.

V. NAME OF PRODUCT

(a) Licensee agrees that in selling, offering for sale, and/or advertising all of its gasoline treated with said anti-knock compound, it will apply to said gasoline the name

.....ETHYL Gasoline (and none other), with the registered trade-mark design and name of Licensor connected therewith. Licensee agrees that whenever it sells gasoline containing said anti-knock compound for resale it will obligate the purchaser to sell, offer for sale and/or advertise the said gasoline under the said name.....ETHYL Gasoline (and none other), with the registered trade-mark design and name of Licensor connected therewith.

(In the event the Licensee sells or offers for sale Ethyl Gasoline under the brand name of the company supplying it with such gasoline (associated with the registered trade-mark design and name of Licensor) then this license shall become void upon discontinuance of deliveries of Ethyl Gasoline by such supplying company to Licensee.)

VI. TRADE-MARK AND PATENTS

(a) Licensee recognizes the validity of all Letters Patent relating to said anti-knock compound and its use of which Licensor is the sole and exclusive licensee, and agrees, during the period of this contract, not to engage in such practices as may infringe the Licensor's patent rights as aforesaid.

(b) Licensor agrees to assume any and all responsibility for trade-mark, label or analogous infringement, including rights relating to unfair competition, with which Licensee or those to whom it sells for resale may be charged for employing in their advertisements the trade-mark of Licensor, and Licensor will, at its own expense, defend any or all litigation based on the use of said word or words and pay any judgment or judgments that may be awarded to the plaintiff in the premises or the amount of any settlement therein, if settlement be made by Licensor, all provided Licensor is promptly notified of such claim and permitted to have full control of defending same.

(c) Licensor agrees, at its own expense, to defend Licensee and/or its customers in any action or actions that may be brought alleging that the use and/or sale of anti-knock compound so supplied by Licensor infringes any Letters Patent of the United States; and Licensor agrees to pay any and all judgments for damages or profits arising out of such litigation that may be assessed against Licensee and/or its customers, thereby saving them harmless therefor; all provided, however, that Licensor shall be given prompt notice of any claim of infringement and is permitted to take full charge of the defense of any such suit or suits.

VII. TERM AND TERMINATION OF LICENSE

The term of this license shall extend indefinitely, subject, however, to the rights of cancellation as follows:

(a) Each of the parties hereto shall have the right (with or without cause) to terminate this license at any time on giving to the other thirty (30) days' notice in writing to that effect.

(b) Licensor may at any time cancel this license by serving Licensee written notice of its election so to do if Licensee fails to comply with any of its terms or conditions.

(c) Notice to either party under any provision of this license shall be deemed good and sufficient if sent by registered mail to the last known post office address of such party.

(d) Without waiving any of Licensor's rights hereinabove described, Licensor may (if this agreement is still in existence) in October of any year substitute for this a new form of license containing new provisions which Licensor has adopted for general use with other non-exclusive licensees, and if Licensee should refuse to accept such substitution, then, in that event, Licensor may cancel this license by giving thirty (30) days' notice in writing to Licensee of its election so to do.

(e) Upon the termination of this agreement or any renewal hereof, Licensee agrees to discontinue the sale and/or advertisement for sale of gasoline containing any of said anti-knock compound, and the use of the name "ETHYL" in any manner.

VIII. CONTRACT TO CONSTITUTE WHOLE AGREEMENT

Any license granted herein is and shall be non-exclusive, and this instrument embodies the whole contract between the parties. No change, addition or erasure of any printed portion hereof (except the filling in of blank lines) shall be valid or binding upon either party. It is declared that there are no oral or other agreements or understandings between them affecting this agreement.

This agreement supersedes all previous agreements, relating to the subject matter, had between Licensor and Licensee; and further, constitutes a personal contract and Licensee shall not transfer or assign same or any part hereof without Licensor's written consent.

This agreement does not constitute Licensee or its purchaser the agent or legal representative of Licensor for any purpose whatsoever.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

Attest:

ETHYL GASOLINE CORPORATION

.....
Secretary

By .....
Sales Manager

(b) Licensor agrees to assume any and all responsibility for trade-mark, label or analogous infringement, including rights relating to unfair competition, with which Licensee or those to whom it sells for resale may be charged for employing in their advertisements the trade-mark of Licensor, and Licensor will, at its own expense, defend any or all litigation based on the use of said word or words and pay any judgment or judgments that may be awarded to the plaintiff in the premises or the amount of any settlement therein, if settlement be made by Licensor, all provided Licensor is promptly notified of such claim and permitted to have full control of defending same.

(c) Licensor agrees, at its own expense, to defend Licensee and/or its customers in any action or actions that may be brought alleging that the use and/or sale of anti-knock compound so supplied by Licensor infringes any Letters Patent of the United States; and Licensor agrees to pay any and all judgments for damages or profits arising out of such litigation that may be assessed against Licensee and/or its customers, thereby saving them harmless therefor; all provided, however, that Licensor shall be given prompt notice of any claim of infringement and is permitted to take full charge of the defense of any such suit or suits.

VII. TERM AND TERMINATION OF LICENSE

The term of this license shall extend indefinitely, subject, however, to the rights of cancellation as follows:

(a) Each of the parties hereto shall have the right (with or without cause) to terminate this license at any time on giving to the other thirty (30) days' notice in writing to that effect.

(b) Licensor may, at any time cancel this license by serving Licensee written notice of its election so to do if Licensee fails to comply with any of its terms or conditions.

(c) Notice to either party under any provision of this license shall be deemed good and sufficient if sent by registered mail to the last known post office address of such party.

(d) Without waiving any of Licensor's rights hereinabove described, Licensor may (if this agreement is still in existence) in October of any year substitute for this a new form of license containing new provisions which Licensor has adopted for general use with other non-exclusive licensees, and if Licensee should refuse to accept such substitution, then, in that event, Licensor may cancel this license by giving thirty (30) days' notice in writing to Licensee of its election so to do.

(e) Upon the termination of this agreement or any renewal hereof, Licensee agrees to discontinue the sale and/or advertisement for sale of gasoline containing any of said anti-knock compound, and the use of the name "ETHYL" in any manner.

VIII. CONTRACT TO CONSTITUTE WHOLE AGREEMENT

Any license granted herein is and shall be non-exclusive, and this instrument embodies the whole contract between the parties. No change, addition or erasure of any printed portion hereof (except the filling in of blank lines) shall be valid or binding upon either party. It is declared that there are no oral or other agreements or understandings between them affecting this agreement.

This agreement supersedes all previous agreements, relating to the subject matter, had between Licensor and Licensee; and further, constitutes a personal contract and Licensee shall not transfer or assign same or any part hereof without Licensor's written consent.

This agreement does not constitute Licensee or its purchaser the agent or legal representative of Licensor for any purpose whatsoever.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

Attest: **ETHYL GASOLINE CORPORATION**

..... Secretary

By ..... Sales Manager

Attest: ACCEPTED:

..... Secretary

By ..... President

L. 48569 Form 105-10M-5-37
Printed in U.S.A.

126

EXHIBIT 13-B

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
405 LEXINGTON AVENUE
NEW YORK

RULES AND REGULATIONS

For Distribution of Gasoline treated with "Q" Brand of Anti-knock Compound

Each filling station shall have prominently displayed on the pump from which it is dispensed, the following notice:

FOR USE AS A
MOTOR FUEL ONLY
CONTAINS
LEAD
(TETRAETHYL)

Containers of treated gasoline sold to the general public shall be labeled:

FOR USE AS A
MOTOR FUEL ONLY
CONTAINS
LEAD
(TETRAETHYL)

Treated gasoline is intended and sold only as a motor fuel and for no other purpose.

There is danger involved in handling all kinds of motor fuel. When breathed as a vapor, or when absorbed through the skin in sufficient quantity, any kind of gasoline will produce serious results, and when allowed to remain in contact with the skin it frequently produces irritation and blistering.

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(TETRAETHYL)

Treated gasoline is intended and sold only as a motor fuel and for no other purpose.

There is danger involved in handling all kinds of motor fuel. When breathed as a vapor, or when absorbed through the skin in sufficient quantity, any kind of gasoline will produce serious results, and when allowed to remain in contact with the skin it frequently produces irritation and blistering.

L 47399 FORM 221.5M 1-37
"PRINTED IN U. S. A."

Form "Jobber Q"

ETHYL GASOLINE CORPORATION

Jobber License Agreement

THIS AGREEMENT, made in duplicate this _____ day of _____, 193__, by and between ETHYL GASOLINE CORPORATION, a Delaware corporation, hereinafter called the LICENSOR, and

a { individual / co-partnership / corporation } _____

hereinafter called the LICENSEE:

WHEREAS, the Licensor has been and is engaged in devising and developing "Q" Brand of Anti-Knock Compound (the basic ingredient of which is now tetraethyl lead) which is intended to be added in small proportion to gasoline to increase its octane value, and is the sole and exclusive Licensee under certain patents therefor, namely, United States Patents Number 1,573,846 of February 23, 1926, and Number 1,668,022 of May 1, 1928, and Number 1,787,419 of December 30, 1930, among others; and

WHEREAS, the Licensee is engaged in the business of selling gasoline and is desirous of obtaining a License, under said patents, to sell and deliver gasoline when treated with the said anti-knock compound; and

WHEREAS, the Licensor has promulgated certain rules and regulations to be observed in connection with the handling, transportation, use and distribution of gasoline treated with said anti-knock compound (which embody those recommended by the Surgeon General of the United States Public Health Service).

NOW, THEREFORE, in consideration of the premises and of the covenants and the agreements hereinafter set forth, the said parties agree as follows:

I. LICENSE

(a) Licensor hereby licenses Licensee to sell and deliver in the territory of the United States of America mentioned on the reverse side of this sheet, and not elsewhere, the improved motor fuel, defined in the aforesaid patents, in quantities less than tank car lots only, and only to users and consumers thereof or to retail dealers for delivery directly by said dealers to users and consumers thereof, on the condition, however, that the Licensee shall have purchased said improved motor fuel from a manufacturer holding a license from the Licensor under said patents.

(b) Licensee agrees that it will supply to Licensor upon written request a list, revised monthly, of all points at which motor fuel delivered under this license is sold as provided in Paragraph (a).

II. INSTRUCTIONS FOR HANDLING

(a) Licensee agrees to comply with all rules and regulations now in existence or which may be hereafter issued from time to time by the Licensor (it being understood that they will include those recommended by the Surgeon General of the United States Public Health Service), and any governmental agency having jurisdiction in the premises relative to the distribution and sale of said gasoline.

(b) Licensee shall cause any notices (furnished by the Licensor or the refinery selling Licensee such gasoline) for the guidance of employees handling said treated gasoline and purchasers thereof to be posted and/or distributed in accordance with the regulations above mentioned.

(c) Licensee agrees to permit a medical representative of Licensor to examine anyone under the control of Licensee whose work is apt to or may have exposed him to the said gasoline, at any reasonable time said representative may desire, and to carry out the recommendations of such representative.

(d) Licensee agrees that whenever it sells such gasoline for resale, it will obligate the purchaser to comply with provisions of paragraphs (a), (b) and (c) immediately preceding, and will supply the purchaser with notices giving information, instructions and rules for the guidance of employees handling such gasoline and the purchasers thereof. In making such sales the Licensee agrees to reserve the right to and will cancel such contract or contracts of sale in the event the purchaser or purchasers do not comply with any of the said requirements.

III. STANDARDIZATION

Licensee agrees not to adulterate or modify or permit to be adulterated or modified said gasoline distributed pursuant to this license. Further, whenever Licensee sells said gasoline for resale it will obligate the purchaser to comply with the terms of this clause entitled "Standardization" and will reserve the right to cancel its contract of sale for breach of such clause.

Licensee will not sell said gasoline for use in aircraft except under emergency circumstances.

IV. NAME OF PRODUCT

(a) Licensee agrees that in selling, offering for sale and/or advertising the gasoline covered by this license, it will apply the name _____ Gasoline (and none other).

WHEREAS, the Licensor has been and is engaged in devising and developing "Q" Brand of Anti-Knock Compound (the basic ingredient of which is now tetraethyl lead) which is intended to be added in small proportion to gasoline to increase its octane value, and is the sole and exclusive Licensee under certain patents therefor, namely, United States Patents Number 1,573,846 of February 23, 1926, and Number 1,668,022 of May 1, 1928, and Number 1,787,419 of December 30, 1930, among others; and

WHEREAS, the Licensee is engaged in the business of selling gasoline and is desirous of obtaining a License, under said patents, to sell and deliver gasoline when treated with the said anti-knock compound; and

WHEREAS, the Licensor has promulgated certain rules and regulations to be observed in connection with the handling, transportation, use and distribution of gasoline treated with said anti-knock compound (which embody those recommended by the Surgeon General of the United States Public Health Service).

NOW, THEREFORE, in consideration of the premises and of the covenants and the agreements hereinafter set forth, the said parties agree as follows:

I. LICENSE

(a) Licensor hereby licenses Licensee to sell and deliver in the territory of the United States of America mentioned on the reverse side of this sheet, and not elsewhere, the improved motor fuel, defined in the aforesaid patents, in quantities less than tank car lots only, and only to users and consumers thereof or to retail dealers for delivery directly by said dealers to users and consumers thereof, on the condition, however, that the Licensee shall have purchased said improved motor fuel from a manufacturer holding a license from the Licensor under said patents.

(b) Licensee agrees that it will supply to Licensor upon written request a list, revised monthly, of all points at which motor fuel delivered under this license is sold as provided in Paragraph (a).

II. INSTRUCTIONS FOR HANDLING

(a) Licensee agrees to comply with all rules and regulations now in existence or which may be hereafter issued from time to time by the Licensor (it being understood that they will include those recommended by the Surgeon General of the United States Public Health Service), and any governmental agency having jurisdiction in the premises relative to the distribution and sale of said gasoline.

(b) Licensee shall cause any notices (furnished by the Licensor or the refinery selling Licensee such gasoline) for the guidance of employees handling said treated gasoline and purchasers thereof to be posted and/or distributed in accordance with the regulations above mentioned.

(c) Licensee agrees to permit a medical representative of Licensor to examine anyone under the control of Licensee whose work is apt to or may have exposed him to the said gasoline, at any reasonable time said representative may desire, and to carry out the recommendations of such representative.

(d) Licensee agrees that whenever it sells such gasoline for resale, it will obligate the purchaser to comply with provisions of paragraphs (a), (b) and (c) immediately preceding, and will supply the purchaser with notices giving information, instructions and rules for the guidance of employees handling such gasoline and the purchasers thereof. In making such sales the Licensee agrees to reserve the right to and will cancel such contract or contracts of sale in the event the purchaser or purchasers do not comply with any of the said requirements.

III. STANDARDIZATION

Licensee agrees not to adulterate or modify or permit to be adulterated or modified said gasoline distributed pursuant to this license. Further, whenever Licensee sells said gasoline for resale it will obligate the purchaser to comply with the terms of this clause entitled "Standardization" and will reserve the right to cancel its contract of sale for breach of such clause.

Licensee will not sell said gasoline for use in aircraft except under emergency circumstances.

IV. NAME OF PRODUCT

(a) Licensee agrees that in selling, offering for sale and/or advertising the gasoline covered by this license, it will apply the name_____Gasoline (and none other).

(b) Licensee will not use the Ethyl trade-mark or design or the "Q" trade-mark or design or the name of the Ethyl Gasoline Corporation, or the word "ETHYL" or "Q" either alone or in combination with any other name, word or words or design, in the sale, offering for sale, and advertising of said treated gasoline under this license. Furthermore, if any purchaser for resale as herein stated fails to comply with this provision, then Licensee will discontinue the sale of said gasoline to such purchaser.

(In the event the Licensee sells or offers for sale said gasoline under the brand name of the company supplying it with such gasoline, then this license shall become void upon discontinuance of deliveries of such gasoline by such supplying company to Licensee. In the event that the Licensee sells or offers for sale said gasoline under a brand name other than that of the company supplying it, then upon request Licensee will furnish Licensor with the name of the company or companies supplying such gasoline.)

V. TRADE-MARK AND PATENTS

(a) Licensee recognizes the validity of all Letters Patent relating to said anti-knock compound and its use of which Licensor is the sole and exclusive licensee, and agrees, during the period of this contract, not to engage in such practices as may infringe the Licensor's patent rights as aforesaid.

(b) Licensor agrees, at its own expense, to defend Licensee and/or its customers in any action or actions that may be brought alleging that the use and/or sale of anti-knock compound so supplied by Licensor infringes any Letters Patent of the United States; and Licensor agrees to pay any and all judgments for damages or profits arising out of such litigation that may be assessed against Licensee and/or its customers, thereby saving them harmless therefor; all provided, however, that Licensor shall be given prompt notice of any claim of infringement and is permitted to take full charge of the defense of any such suit or suits.

VI. TERM AND TERMINATION OF LICENSE

The term of this license shall extend indefinitely, subject, however, to the rights of cancellation as follows:

(a) Each of the parties hereto shall have the right (with or without cause) to terminate this license at any time on giving to the other thirty (30) days' notice in writing to that effect.

(b) Licensor may at any time cancel this license by serving Licensee written notice of its election so to do if Licensee fails to comply with any of its terms or conditions.

(c) Notice to either party under any provision of this license shall be deemed good and sufficient if sent by registered mail to the last known post office address of such party.

(d) Without waiving any of Licensor's rights hereinabove described, Licensor may (if this agreement is still in existence) in June of any year substitute for this a new form of license containing new provisions which Licensor has adopted for general use with other licensees in the United States holding a similar form of license.

(e) Upon the termination of this agreement or any renewal hereof, Licensee agrees to discontinue the sale and/or advertisement for sale of gasoline containing any of said anti-knock compound.

VII. CONTRACT TO CONSTITUTE WHOLE AGREEMENT

Any license granted herein is and shall be non-exclusive, and this instrument embodies the whole contract between the parties. No change, addition or erasure of any printed portion hereof (except the filling in of blank lines) shall be valid or binding upon either party. It is declared that there are no oral or other agreements or understandings between the parties affecting this agreement.

This agreement supersedes all previous agreements, relating to the subject matter, had between Licensor and Licensee; and further, constitutes a personal contract and Licensee shall not transfer or assign same or any part hereof without Licensor's written consent.

This agreement does not constitute Licensee or its purchaser the agent or legal representative of Licensor for any purpose whatsoever.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

Attest: ETHYL GASOLINE CORPORATION

_____ By _____

Secretary Sales Manager

Attest: ACCEPTED:

_____ By _____

Secretary President

(b) Licensor may at any time cancel this license by serving Licensee written notice of its election so to do if Licensee fails to comply with any of its terms or conditions.

(c) Notice to either party under any provision of this license shall be deemed good and sufficient if sent by registered mail to the last known post office address of such party.

(d) Without waiving any of Licensor's rights hereinabove described, Licensor may (if this agreement is still in existence) in June of any year substitute for this a new form of license containing new provisions which Licensor has adopted for general use with other licensees in the United States holding a similar form of license.

(e) Upon the termination of this agreement or any renewal hereof, Licensee agrees to discontinue the sale and/or advertisement for sale of gasoline containing any of said anti-knock compound.

VII. CONTRACT TO CONSTITUTE WHOLE AGREEMENT

Any license granted herein is and shall be non-exclusive, and this instrument embodies the whole contract between the parties. No change, addition or erasure of any printed portion hereof (except the filling in of blank lines) shall be valid or binding upon either party. It is declared that there are no oral or other agreements or understandings between the parties affecting this agreement.

This agreement supersedes all previous agreements, relating to the subject matter, had between Licensor and Licensee; and further, constitutes a personal contract and Licensee shall not transfer or assign same or any part hereof without Licensor's written consent.

This agreement does not constitute Licensee or its purchaser the agent or legal representative of Licensor for any purpose whatsoever.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed the day and year first above written.

Attest: ETHYL GASOLINE CORPORATION

_____ By _____

Secretary Sales Manager

Attest: ACCEPTED:

_____ By _____

Secretary President

FORM 819—L. 47600 SM 1-37 "PRINTED IN U. S. A."

REGULATIONS PROPOSED FOLLOWING THE TETRAETHYL LEAD INVESTIGATION

These regulations have been formulated in accordance with the recommendations of the Surgeon General's committee, under whose direction the investigation into the hazards from tetraethyl lead gasoline was conducted. They are proposed for adoption by the several States in order to secure uniformity of control and were the subject of consideration at the meeting of the State and Territorial health authorities with the Surgeon General on May 25, 1926. These regulations are based upon present conditions and knowledge and it is appreciated that changes may be advisable from time to time.

By the term "tetraethyl lead" is meant the chemical substance $Pb(C_2H_5)_4$ of a commercial grade of purity or higher. Ethyl fluid is the concentrated commercial fluid containing tetraethyl lead and other ingredients, which is to be mixed with gasoline to make ethyl gasoline. The manufacture of ethyl fluid consists in adding these other ingredients to tetraethyl lead and is called "blending." The process of adding the ethyl fluid to gasoline to form ethyl gasoline is called "mixing." In the term "ethyl gasoline" as herein used are included all other motor fluids containing tetraethyl lead.

I. Proposed regulations for the manufacture of tetraethyl lead and the blending of the latter to make ethyl fluid.

II. Proposed regulations for mixing.

III. Proposed regulations for distribution of ethyl gasoline.

IV. Proposed regulations for automobile garages, repair shops, service stations, and filling stations.

Proposed Regulations for the Manufacture of Tetraethyl Lead and the Blending of the Latter to Make Ethyl Fluid

1. No person shall be employed without adequate instructions as to the nature of the hazard and the precautions to be taken.

2. Each worker shall have a periodical physical examination, which shall consist of such physical and other tests as are indicative of the absorption of tetraethyl lead and shall include, as a minimum, the following items:

(*a*) Examination of blood for stippling by carefully trained workers, using positive and negative controls, without knowledge of the source of the slides; this examination shall be once a week for the first three weeks and bimonthly thereafter.

(*b*) Semimonthly contact with plant physician for informal statement as to general health.

(*c*) Bimonthly weight, stripped.

(*d*) Bimonthly systolic and diastolic blood pressure estimation while sitting.

(*e*) Bimonthly hemoglobin estimation by Dare's hemoglobinometer.

Exact records of these examinations shall be kept, and persons showing gradually increasing amounts of stippling, sudden development of stippling, or other marked deviation from normal shall be promptly excluded from tetraethyl lead work, irrespective of whether or not such finding may be indicative of lead poisoning. All parts of the plants where lead in any form is used shall be subject to sanitary measures to prevent collection and dissemination of lead dust.

4. Separate ventilation systems shall be provided for the manufacturing apparatus and for the air of the rooms, the outlets of the latter being located near the floor of each room and all external inlets and outlets being so situated as to avoid dustiness and appreciable contamination of the air around the plant.

5. Daily inspection shall cover efficiency of ventilating systems, all joints, valves, and gaskets of manufacturing apparatus, and adequacy of pressure-hose respirators.

6. All containers of ethyl fluid or tetraethyl lead shall be labeled as to exact content and danger and shall conform to the regulations of the Interstate Commerce Commission. These containers shall be carefully tested for leaks and shall bear a plainly legible label stating that they are to be closed tight immediately when emptied, without cleansing, and sent back to the plant.

7. Kerosene or other material used for cleansing the used containers of ethyl fluid or tetraethyl lead shall be placed in the containers

by means of a closed system with air vents to outside air and with adequate ventilation.

8. The filling shall be performed by means of a closed system with air vent from the container to the outside air, and with adequate ventilation.

9. A dye shall be added to ethyl fluid in sufficient amount to give staining qualities to the ethyl gasoline to deter individuals from using it for cleansing or other similar purposes.

10. Reports shall be made monthly to the appropriate officer of the State concerned covering the following points:

Number of workers employed at beginning of month.
Number of workers employed at close of month.
Number of new workers.
Number of workers separated from tetraethyl lead work on account of results of examinations.
Number of definite cases of poisoning.
Condition of cases of poisoning previously reported so far as known.

Proposed Regulations for Mixing

1. The maximum content of tetraethyl lead in commercial ethyl gasoline shall be in the proportion of 1:1,260 by volume for commercial tetraethyl lead, or 1:1,300 for $Pb(C_2H_5)_4$ C. P.

2. Mixing ethyl fluid with gasoline except for certain specific requirements such as research, military and naval use, and air-mail service shall be done only at the main distribution centers and in not less than tank-car lots. Adequate provision shall be made at each such center for thorough mechanical distribution of the ethyl fluid throughout the gasoline, and the efficiency of such distribution shall be controlled by the analysis of samples.

3. The locations of these centers and the names of persons engaged in mixing shall be reported to the State department of health of the State of employment.

4. As few persons at each center as practicable shall be employed for this work.

5. No person shall be engaged for mixing until adequately instructed as to the mechanics of mixing, the dangers, and the precautions to be taken.

6. The distributor of ethyl fluid shall provide a special corps of adequately trained instructors and service men.

7. All mixing shall be done with the maximum ventilation practicable under weather conditions existing at the time.

8. Operation of the pumps shall be instantly stopped at the appearance of a leak or other defect, and no attempt shall be made to repair or disconnect the system until a qualified man takes personal charge of it.

9. Floors of all places where any possibility of spilling is present are to be provided with drains and proper facilities for making possible a complete flushing out of all spilled fluid, or in their absence provision shall be made for chemically neutralizing any spillage as it occurs.

10. No bulk mixing station shall be dismantled or disconnected for repairs except by a qualified man.

11. Kerosene or other efficient means of preventing skin absorption of tetraethyl lead and washing facilities shall always be conveniently available.

12. The rules and instructions affecting the employees shall be posted in a conspicuous place where the ethyl fluid is being handled.

13. The distributor of ethyl fluid shall, with the advice of the United States Public Health Service, select a representative group of at least 40 men exposed to the hazard of mixing, representing the entire area of distribution. This group shall serve as an index of the hazard of mixing. Monthly for the first three months and every

four months thereafter this group of employees shall have an examination, which shall consist of:

(a) Examination of blood for stippling, by carefully trained workers, using positive and negative controls, without knowledge of the source of the slides.

(b) Examination of fecal samples of lead.

(c) Report as to general state of health.

(d) Weight, stripped.

(e) Blood-pressure estimation, diastolic and systolic, when sitting.

(f) Hemoglobin estimation by Dare instrument.

Exact records of these examinations shall be kept.

14. The results of the examinations shall be reported promptly to the Surgeon General of the Public Health Service.

1862°—26†—9

Proposed Regulations for Distribution of Ethyl Gasoline

1. Each filling station shall have prominently displayed at the pump, or in other conspicuous place, the following warning or one of similar effectiveness: "Ethyl gasoline containing tetraethyl lead, to be used as motor fuel only, and not for cleaning or any other purpose."

2. Suitable leaflets shall be available at all filling stations when ethyl gasoline is sold, for distribution on request. These leaflets shall describe the possible dangers and precautions to be taken in the use of ethyl gasoline.

3. Containers of ethyl gasoline sold to the general public shall be labeled: "Ethyl gasoline containing tetraethyl lead. To be used for motor fuel only, and not for cleaning or any other purpose."

Proposed Regulations for Automobile Garages, Repair Shops, Service Stations and Filling Stations

1. Automobile garages or repair shops holding more than five cars and all inclosed public-service stations and inclosed filling stations for automobiles should be registered with the local health department.

2. In addition to doors and to window ventilation in summer, automobile garages, repair shops, inclosed service stations, and inclosed filling stations should have permanently operative ventilation at least equivalent to that given by an opening or openings at ceiling level free to the outside air, but protected from down drafts, with cross-section of 0.2 per cent of the floor space available for cars, together with an opening or openings for inlet near floor level of corresponding effectiveness, both arranged to give positive dilution of exhaust gases as generated. This is to be taken as a minimum, special conditions requiring greater permanent ventilation.

3. Automobile garages, repair shops, inclosed service stations, and inclosed filling stations should be kept reasonably clean and free from dust by means of flushing out and moist sweeping or vacuum cleaning.

4. Automobile garages, repair shops, service stations, and filling stations should keep conspicuously posted a copy of these regulations with the following statements in large type:

AUTOMOBILE EXHAUST GAS IS DANGEROUS. MOTORS SHOULD NOT RUN LONGER THAN 30 SECONDS UNLESS THE CAR IS IN MOTION OR THE EXHAUST IS DIRECTLY CONNECTED TO THE OUTSIDE AIR. LIQUIDS SOLD AS MOTOR FUEL, EXCEPT ORDINARY GASOLINE, SHOULD BE USED ONLY AS MOTOR FUEL, AND NOT FOR CLEANING OR OTHER PURPOSES. THE FUMES FROM THE EVAPORATION OF EVEN ORDINARY GASOLINE MAY BE INJURIOUS.

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EXHIBIT 14-B

TREASURY DEPARTMENT
UNITED STATES PUBLIC HEALTH SERVICE
HUGH S. CUMMING, SURGEON GENERAL

CHANGES IN THE REGULATIONS PROPOSED FOR TETRAETHYL LEAD GASOLINE

REPRINT No. 1260
FROM THE
PUBLIC HEALTH REPORTS
NOVEMBER 30, 1928
(Pages 3147-3149)

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1929

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CHANGES IN THE REGULATIONS PROPOSED FOR TETRAETHYL LEAD GASOLINE[1]

In 1926 there were published, as part of Public Health Bulletin No. 163, which contained the report of the committee on tetraethyl lead gasoline, four sets of regulations which had been formulated in accordance with the committee's recommendations. These were proposed for adoption by the several States in order to secure uniformity of control, and were the subject of consideration at the meeting of the State and Territorial health authorities with the Surgeon General on May 25, 1926. The regulations were in four series, as follows:

I. Proposed regulations for the manufacture of tetraethyl lead and the blending of the latter to make ethyl fluid.
II. Proposed regulations for mixing.
III. Proposed regulations for distribution of ethyl gasoline.
IV. Proposed regulations for automobile garages, repair shops, service stations, and filling stations.

It was stated in the above-mentioned bulletin that the regulations thus published were based on the conditions and knowledge then existent, and that changes might be advisable from time to time.

The results of the past two and one-half years have fully justified the findings of the committee. In regard, however, to that regulation in Series III which has to do with warning signs on the pumps, it has come to be felt that the latitude allowed in the form, wording, and position of the sign has left much to be desired in uniformity and effectiveness. Moreover, the question has been reconsidered as to whether the word "lead" or the word "ethyl" should be stressed. It was felt at the time when the original regulations were formulated, since there had been much discussion in the press about ethyl gasoline and its possible danger, that the warning would be more effective if all the gasoline containing tetraethyl lead were labeled "ethyl." Much of that public discussion has passed, and it is now believed that emphasis should rather be on the fact that the gasoline contains lead. Developments since the committee's report have strengthened the opinion that, so far as the gasoline is concerned, the hazard, if any, is merely that of lead.

In view of these two considerations, the Surgeon General, after obtaining the advice of the members of the original committee—Dr. William H. Howell, chairman, Dr. A. J. Chesley, Dr. David L. Edsall, Dr. Reid Hunt, Dr. Walter S. Leathers, Prof. Julius Stieglitz, and Prof. Charles-Edward Amory Winslow—has proposed to the various State health authorities the following set of regulations to take the place of Series III dealing with the distribution of ethyl gasoline.

[1] Reprint from the Public Health Reports, vol. 43, No. 48, Nov. 30, 1928, pp. 3147-3149.

1. Each filling station shall keep prominently displayed on each pump which delivers motor fuel containing tetraethyl lead, a sign or signs reading as follows, in prominent heavy gothic capital letters, black on white background:

CONTAINS
LEAD
(Tetraethyl) and
Is to be Used as
Motor fuel only
Not for cleaning
or any other use
Avoid Spilling

The printed matter on the sign, not counting the enclosing border, shall measure approximately 6½ inches wide by 7½ inches high. The first line (Contains) shall be in letters ⅜ of an inch high, the second (Lead) in letters 1 inch high, and the remainder in letters ¼ of an inch high. All words of the sign shall be kept clear and prominent, the entire sign to be within the limits of 5 feet and 4 feet above the ground level. Such a sign shall be maintained on the face of each side of the pump at which delivery could be made.

2. Suitable leaflets shall be available for distribution on request at all filling stations where ethyl gasoline is sold. These leaflets shall describe the possible dangers and precautions to be taken in the use of ethyl gasoline.

3. Containers of ethyl gasoline sold to consumers shall bear the following label in such a position as to be plainly legible when the container is opened:

CONTAINS
LEAD
(Tetraethyl) and
Is to be Used as
Motor fuel only
Not for cleaning
or any other use
Avoid Spilling

Though the term "ethyl gasoline" is used in paragraphs 2 and 3 of the above proposed regulations as well as in Series II, which concerns the mixing of ethyl fluid, it is understood that with the use of these new signs gasoline distributors will be relieved from the necessity of using the word "ethyl" in connection with their product, since in the term "ethyl gasoline" as used in these regulations are included all other motor fuels containing tetraethyl lead. On account of the position specified, a considerable interval of time and in some cases structural alterations in the pumps will be required before the new signs can be expected to be installed at all filling stations which are already equipped with old signs. It is believed that these new signs, expressing in as few and as quickly read words as possible the elementary precautions considered advisable, having a uniform lettering, and placed so that they may easily be read from the driver's seat of an automobile, will be more satisfactory than any specification as to the name of the gasoline, and will form an adequate protection to the motorist against this particular hazard.

EXHIBIT 14-C

CONTAINS
LEAD
(TETRAETHYL) AND
IS TO BE USED AS
MOTOR FUEL ONLY,
NOT FOR CLEANING
OR ANY OTHER USE.
AVOID SPILLING.

EXHIBIT 14-D

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EXHIBIT 17-A

ETHYL GASOLINE CORPORATION

Jobbers' Information Report

DIVISION HEADQUARTERS DATE

Name _____

Address _____
Street Town State

Has jobber applied for Ethyl License Agreement? _____ (Yes No) Approved _____ (Yes No) Brand _____

Has jobber applied for "Q" License Agreement? _____ (Yes No) Approved _____ (Yes No) Brand _____

Jobber now applying for _____ (Price) Ethyl License Agreement _____ (Brand) "Q" License Agreement

Third grade supplied by _____ Brand _____ { Tank Car / Tank Wagon }

Regular gasoline supplied by _____ Brand _____ { Tank Car / Suppliers T.W. / Jobbers T.W. }

Premium gasoline supplied by _____ Brand _____ { Tank Car / Tank Wagon }

Ethyl gasoline supplied by _____ Brand _____ { Tank Car / Comp. Car / Suppliers T.W. / Jobbers T.W. }

Jobber could obtain _____ (Brand) Ethyl Gasoline from _____ Mile

Gallonage for one year preceding investigation _____
Ethyl Regular Premium Third

How long has jobber been in gasoline business (approximate)? _____

Bulk plants _____ (Number) Located at _____

Company owned stations _____ (Number) General appearance _____

Ethyl dealers _____ (Number) Others _____ (Number) General Character _____

Condition of Ethyl pump markings _____ (Good Poor) "Q" pump markings _____ (Good Poor)

Is jobber contracted for Ethyl Gasoline requirements? _____ (Yes No) "Q" Gasoline _____ (Yes No)

Present percentage Ethyl sales to total sales _____

Have Jobbers' employees full knowledge of Ethyl Gasoline? _____

Would Ethyl demonstration aid jobber and employees? _____

Address _____
Street Town State

Has jobber applied for Ethyl License Agreement? _____ (Yes No) Approved _____ (Yes No) Brand _____

Has jobber applied for "Q" License Agreement? _____ (Yes No) Approved _____ (Yes No) Brand _____

Jobber now applying for _____ (Pr.) Ethyl License Agreement _____ (Brand) "Q" License Agreement.

Third grade supplied by _____ Brand _____ { Tank Car / Tank Wagon

Regular gasoline supplied by _____ Brand _____ { Tank Car / Suppliers T.W. / Jobbers T.W.

Premium gasoline supplied by _____ Brand _____ { Tank Car / Tank Wagon

Ethyl gasoline supplied by _____ Brand _____ { Tank Car / Comp. Car / Suppliers T.W. / Jobbers T.W.

Jobber could obtain _____ (Brand) Ethyl Gasoline from _____ Mile

Gallonage for one year preceding investigation _____
Ethyl Regular Premium Third

How long has jobber been in gasoline business (approximate)? _____

Bulk plants _____ (Number) Located at _____

Company owned stations _____ (Number) General appearance _____

Ethyl dealers _____ (Number) Others _____ (Number) General Character _____

Condition of Ethyl pump markings _____ (Good Poor) "Q" pump markings _____ (Good Poor)

Is jobber contracted for Ethyl Gasoline requirements? _____ (Yes No) "Q" Gasoline _____ (Yes No)

Present percentage Ethyl sales to total sales _____

Have Jobbers' employees full knowledge of Ethyl Gasoline? _____

Would Ethyl demonstration aid jobber and employees? _____

Does jobber push sale of Ethyl Gasoline? _____

Reputation in Trade _____ Business ethics _____
(Good) (Questionable) (Unethical) (Date)

Jobber visited last on _____ (Date) Reported last on _____ (Date)

Remarks (Over)

Signed _____

Form 226-L. 34497-1094-1-34 "Printed in U.S.A."

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ETHYL GASOLINE CORPORATION

Jobbers' Information Report

.....DIVISION.....HEADQUARTERS DATE.....

Name.....

Address.....Street Town.....State.....

Has jobber applied for Ethyl License Agreement?.....(Yes No) Approved.....(Yes No) Brand.....

Has jobber applied for "Q" License Agreement?.....(Yes No) Approved.....(Yes No) Brand.....

Jobber now applying for.....(Brand) Ethyl License Agreement.....(Brand) "Q" License Agreement

Ethyl Gasoline supplied by.....Brand..... { Tank Car / Comp. Car / Suppliers T. W. / Jobbers T. W.

Leaded regular gasoline supplied by.....Brand..... { Tank Car / Suppliers T. W. / Jobbers T. W.

Other premium gasoline supplied by.....Brand..... { Tank Car / Tank Wagon

Unleaded regular gasoline supplied by.....Brand..... { Tank Car / Tank Wagon

Third grade supplied by.....Brand..... { Tank Car / Tank Wagon

Jobber could obtain.....(Brand applied for) Ethyl Gasoline from.....Mile

Gallonage for one year preceding investigation.....
(Ethyl / Leaded Reg. / Other Premium / Unleaded Reg. / Third)

Yearly percentage each grade to total sales.....
(Ethyl / Leaded Reg. / Other Premium / Unleaded Reg. / Third)

Present percentage each grade to total sales.....
(Ethyl / Leaded Reg. / Other Premium / Unleaded Reg. / Third)

How long has jobber been in gasoline business (Approximately)?.....

Has jobber previously operated under other name?.....Name.....

Bulk plants.....(Number) Located at.....Tankage.....(Total number & capacity) .....(Number used for leaded gasolines)

Territory.....(Counties)

Company owned stations.....(Number) Appearance.....Ethyl dealers.....(Number) Others.....(Number) Character.....

Condition of Ethyl pump markings.....(Good / Poor) "Q" pump markings.....(Good / Poor)

Has Ethyl demonstration been arranged for jobber and employees?.....

Does jobber push sale of Ethyl Gasoline?.....Leaded Reg?.....Third?.....Other?.....

Jobber visited last on.....(Date) Reported last on.....(Date)

Field Representative's Remarks on Reverse Side Signed.....

Has jobber applied for "Q" License Agreement?..... (Yes / No) Approved..... (Yes / No) Brand.....

Jobber now applying for..... (Brand) Ethyl License Agreement..... (Brand) "Q" License Agreement

Ethyl Gasoline supplied by..... Brand..... { Tank Car / Comp: Car / Suppliers T. W. / Jobbers T. W.

Leaded regular gasoline supplied by..... Brand..... { Tank Car / Suppliers T. W. / Jobbers T. W.

Other premium gasoline supplied by..... Brand..... { Tank Car / Tank Wagon

Unleaded regular gasoline supplied by..... Brand..... { Tank Car / Tank Wagon

Third grade supplied by..... Brand..... { Tank Car / Tank Wagon

Jobber could obtain..... (Brand applied for) Ethyl Gasoline from..... Mile

Gallonage for one year preceding investigation.....

Ethyl | Leaded Reg. | Other Premium | Unleaded Reg. | Third

Yearly percentage each grade to total sales.....

Ethyl | Leaded Reg. | Other Premium | Unleaded Reg. | Third

Present percentage each grade to total sales.....

Ethyl | Leaded Reg. | Other Premium | Unleaded Reg. | Third

How long has jobber been in gasoline business (Approximately)?.....

Has jobber previously operated under other name?..... Name.....

Bulk plants..... (Number) Located at..... Tankage..... (Total number & capacity) ..... (Number used for leaded gasolines)

Territory..... (Counties)

Company owned stations..... (Number) Appearance..... Ethyl dealers..... (Number) Others..... (Number) Character.....

Condition of Ethyl pump markings..... (Good / Poor) "Q" pump markings..... (Good / Poor)

Has Ethyl demonstration been arranged for jobber and employees?.....

Does jobber push sale of Ethyl Gasoline?..... Leaded Reg?..... Third?..... Other?.....

Jobber visited last on..... (Date) Reported last on..... (Date)

Field Representative's Remarks on Reverse Side Signed..... (Field Representative)

Division Manager's Remarks

.....

.....

.....

L. 31606 Form 226 5M 1-38 "Printed in U. S. A."

EXHIBIT 17-C

FIELD REPRESENTATIVE MANUAL

Ethyl Gasoline Corporation
Chrysler Building
New York City

FIELD REPRESENTATIVE MANUAL

Ethyl Gasoline Corporation
Chrysler Building
New York City

HOW TO MAKE A SERVICE STATION SURVEY

SERVICE STATION OBSERVATION

HOW TO MAKE AN AUTOMOBILE AGENCY CONTACT

SALES PROMOTION MEETINGS

JOBBER INVESTIGATION

ROUTINE TO BE FOLLOWED IN THE
COLLECTION AND IDENTIFICATION OF SAMPLES

HOW TO MAKE A SERVICE STATION SURVEY

PURPOSE

1. To collect information on how Ethyl Gasoline is marketed through their service stations by each of our customers.

2. To give the service station operator facts which will help him in converting customers to Ethyl Gasoline.

PROCEDURE

Drive in to the service station as an ordinary motorist. If the pumps are so located that it is possible, stop midway between the Ethyl and the non-premium pump. If the pumps are of the dual type, indicate by your actions you are undecided as to which gasoline you wish to buy. The operator will most likely show his attitude towards selling Ethyl. In your conversation you can determine his knowledge of Ethyl and whether he is trying to sell it.

From the time that you enter the drive of the service station be on the alert for the appearance of the station and whether this particular station is giving the proper service to its customers. The question of service is comparative. In certain sections of the country they go to extremes in dusting off the car, wiping windshields, and other helps. We must judge service, however, on the procedure generally employed in the particular community.

After you have decided to purchase Ethyl, introduce yourself and give the operator information on Ethyl Gasoline and how to sell it. The particular information that you are to give to an operator depends upon his personality and mentality. You will have to judge the man and give him information which he can retain. Do not talk over his head.

You can probably secure his interest by telling of some late events in which Ethyl was used, such as the Army Air Corps maneuvers, the Post-Gatty flight, or any other records which have been in the newspapers within the last few days. After you have secured his interest you can tell him of the increased performance with Ethyl in any car, the adoption of high compression heads by Ford, the statement of Packard in their late instruction book and other things that will suit his particular personality. If he has a car of his own and does not use Ethyl, get him to try it. Possibly the spark on his car could be advanced to give better performance. If so, assist him in making the change. Call to his attention automobile agencies and owners who use Ethyl. By all means go over the Primer with him. If his company has not furnished him with a booklet on their Ethyl Gasoline, give him one from your own stock.

If he has any statements on valve burning, spark plugs or other

PROCEDURE

Drive in to the service station as an ordinary motorist. If the pumps are so located that it is possible, stop midway between the Ethyl and the non-premium pump. If the pumps are of the dual type, indicate by your actions you are undecided as to which gasoline you wish to buy. The operator will most likely show his attitude towards selling Ethyl. In your conversation you can determine his knowledge of Ethyl and whether he is trying to sell it.

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If he has any statements on valve burning, spark plugs or other

troubles, give these particular attention. Secure the names of the individuals making the complaint. Tell him you'll see the man and do so. After you have investigated the matter, go back to see the operator and advise him of your findings.

Call to his attention that his company wishes to sell Ethyl Gasoline and it will be to his advantage to convert as many customers to his brand of Ethyl as possible. The Ethyl user is a quality buyer and will stay with it rather than go to other stations. The quality buyer will have his car greased and his oil changed at regular intervals.

Make a friend of the operator and show him by your actions that you are trying to assist him. Some of our men have reported that certain information we desire has created an antagonistic attitude as they think we are snooping or delving into affairs which do not concern us. This is a sad reflection on any employer of the Ethyl Gasoline Corporation. The trouble is with our man. It definitely shows that he has not conducted himself in a diplomatic manner. There are many things connected with our business which have to be handled more diplomatically than a service station survey. It is up to you to use methods which will produce results for us and assist the service station operator in increasing his knowledge of his product and his ability to sell one of them which means more money to his company.

REPORTS

The report forms should be self-explanatory and we need all of the information requested. Some of the information, such as, station appearance and service offered, is the opinion of the man making the report. We desire it this way and do not wish to lay down arbitrary rules covering each heading. You are a typical motorist and each of you have distinct ideas on what should be done. This same is true of the American automobile public. As for the station appearance, this should be judged on the basis of similar stations in the same locality. Some service stations in certain sections of this country are very elaborate. It is not fair to compare stations in other parts of the country with them.

The filling out of report forms is very important. If it is not filled out properly, it is of no value to us. Care must be excercised. Our statistician cannot possibly know what you mean by a given statement unless it is absolutely clear. He must use the information as it is put down.

Some of our customers have objected rather strenuously to our securing the percentage of Ethyl Gasoline sold at their stations. We have advised that no percentage figures are to be requested from the service station operators of certain companies. The Division Managers probably have issued instructions on certain other companies. Where there is a definite objection to our requesting such information, we must not do it. As for the exact percentage figure, I do not believe that it is of any great importance. We certainly should not request to see the figures on the station. We can get an excellent idea of the service station operator's attitude, however, from his answer to our question. We should casually ask how Ethyl is going and the service station operator will generally reply "We sell as much Ethyl Gasoline as white gasoline", while he may not be selling anywhere near fifty per cent. This operator is trying to create the impression that it is a popular motor fuel. If on the other hand he states "We don't sell ... [illegible]

tion we desire has created an antagonistic attitude as they think we are snooping or delving into affairs which do not concern us. This is a sad reflection on any employer of the Ethyl Gasoline Corporation. The trouble is with our man. It definitely shows that he has not conducted himself in a diplomatic manner. There are many things connected with our business which have to be handled more diplomatically than a service station survey. It is up to you to use methods which will produce results for us and assist the service station operator in increasing his knowledge of his product and his ability to sell one of them which means more money to his company.

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general statements are better for our purpose than the exact percentage.

The service station survey has been in use for six months. Most of our customers have appreciated the work we are trying to do. They are not equipped to secure such information through their own organization although the information is of such value that some of them are seriously considering it. Their officials have laid down certain rules for their service station operators but have very little idea on how well they are being carried out. They realize a large percentage of their sales profits and good will come from the attitude of the service station personnel. Where you find conditions existing which are absolutely contrary to the interest of the oil industry, call it to the attention of the service station supervisor or district manager.

We do not want any reports on dealers' stations except where it is absolutely impossible to secure five reports on company owned operated or leased stations. However you will probably have some time which can be devoted to educational work with dealers. Their sales are as important to us as company owned stations, but there is nothing we can do if they do not push Ethyl Gasoline. We must endeavor to give them information on Ethyl whenever possible.

SERVICE STATION OBSERVATION

PURPOSE

1. To secure informatio which will be of assistance to us in laying out our advertising campaign and sales promotion work.

2. To give our field staff and the New York office first hand information on the problems confronting the service station operator at representative stations.

3. To give information to the service station operator which will assist him to increase his sales of Ethyl Gasoline.

SELECTING A SERVICE STATION

We desire to secure information from a relatively small number of service stations in which it will be possible for our men to act as observers over a period of time which will be representative of the average conditions in service stations over the country as a whole. In order to do this it will be necessary for each field representative to give considerable thought to his selection of the service station in which he works each month. The station should have as large a gallonage as possible. It should be one that has both transient and local trade. It should be in an average community, not either in a rich or poor section and not in a locality catering principally to trucks.

Each field representative should know local conditions and should be informed on the companies in his territory which will give him the most and best information. From these facts it should be decided in what company's station the observation for a current month shall be made. After selecting the company the matter should be taken up with the District Manager of the oil company to secure his approval. With the District Manager and the Service Station Supervisor, the exact station should be selected.

Have the Service Station Supervisor accompany you to the station and interduce you to the operator. This should be done the day before the observations are to take place. You and the Supervisor go over the proposed work with the operator very thoroughly in order that he may know what you expect to accomplish. The operator can be of great assistance in securing the desired information and enable you to secure maximum value from the work. It is essential that you make friends with the operator or operators. By so doing you can secure information that otherwise would be impossible. They can ask questions and secure the correct answer.

In your first contact with the Service Station Operator determine the hours when most business is done and be sure that you are there during that time. The station may have two or possibly three peaks during the day

or evening. All peaks must be covered.

Before reporting to the station for observations make out a work sheet for tabulating the information you desire in making out your report. Go over the report very thoroughly before you attempt to make out the work sheet. Tabulate the information which will be required. Arrange the work sheet so that you can not miss any information which you may need in making out the report. This sheet can be arranged so that little time will be required in tabulating.

Do not be late in reporting to the station. If it has been decided to work from the time the station is opened in the morning, be there at that time.

OBSERVATIONS

It is understood that you shall act only as an Observer at Service Stations in all states except those in which we are qualified to do business. You might subject us to a heavy tax in certain states if you were to operate the pump or be instrumental in making a particular sale. You are not to put on a uniform or assist the operator in his routine duties. You are not to approach any customer or talk to him on Ethyl gasoline until he has told the operator what kind of gasoline he wishes to purchase. After the order has been placed for the particular fill of gasoline you can engage the party in conversation and secure the desired information. In many instances it will only be necessary for you to listen to the conversation of the operator. If any questions are asked for which the operator needs assistance you can help him.

During the time in which no cars are in the station you can give the operators information which will assist them in converting the users of non-premium gasoline to Ethyl. Suggestions can be tried on various classes of cars and owners. If you are on a friendly basis with the operator he will be pleased to try your suggestions. If any suggestions are outstanding in their effectiveness, please give us a full report on what was done and said.

Your contact with the Service Station for a day each month should enable you to secure information which will be of great value to you and to us on the problems confronting the service station operator who desires to increase the sale of Ethyl Gasoline. You can learn a great deal from the operator. Do not hesitate to ask questions. If the station is outstanding in its percentage of Ethyl, give us the operator's complete sales story from his approach to the customer to his bidding the customer good-bye. This should be given in the exact language of the operator. We do not have any information on the sales story as given by the men who are actually selling Ethyl at the pump. We know some operators are very effective in selling Ethyl. We want to put their words in the mouth of every operator. It is up to you to give us this information.

In any state where we are qualified to do business you can put on the uniform and conduct yourself exactly as a regular operator.

REPORTS

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REPORTS

We are basing to some extent, our advertising appropriation, what we shall say in advertising to convert more users to Ethyl and Sales

Promotion, on about one thousand reports of Service Station observations per year. It is needless to say that all reports to be of value must be accurate, some however, have come in to this office which were useless. Study must be given to them and be sure that any statement is authentic before placing it on the report form.

In the main the report form is self explanatory, but some confusion may arise on the headings covered in the following paragraphs.

For the "Gallons Sales Gasoline Today" we desire the total figures for the day which would include the time you were absent from the station. In other words the complete record of sales for that date.

"No. cars purchasing Ethyl by price class" and "No. cars purchasing Non-Premium by price class" give the actual number making purchases while you were observing. Do not take any figures under this heading from the operator.

"% cars purchasing Ethyl by price class" apply only to the class of cars and must be calculated correctly. The following is an example:

No. cars purchasing Ethyl by price class:			Low	8	Medium 10	High	3
No. cars	" Non-Premium	"	"	Low 12	Medium 10	High	1
% cars	" Ethyl	"	"	Low 40	Medium 50	High	75

"Avg. Gallons Purchased" should include only the record for the time you are in the station.

"Suggestions to Increase Sales at this Station". This should always be filled out. Certainly you can see something which would warrant comment.

Under "Remarks" give us any ideas you secure from the station operator or from your observations. Use the entire reverse side of the sheet if necessary.

HOW TO MAKE AN AUTOMOBILE AGENCY CONTACT

Outline

PURPOSE

1. To have automobile dealers (Sales and Service) recommend Ethyl Gasoline to all of their owners.

2. To have all agencies or other distributing units know the true facts on Ethyl Gasoline, what it will do and what it will not do, such as harm the engine or other parts of the car.

3. To secure authentic information on the attitude of various agencies on our product.

4. To secure suggestions and constructive criticism of our general business and ideas on how we could further the sale of Ethyl Gasoline.

PROCEDURE

A. Sales Department

1. Obtain name of Owner or Sales Manager before making a call.

2. Obtain some information on the characteristics of the gentlemen and his attitude toward Ethyl Gasoline before making call.

3. If unfavorable, correct attitude by showing him logic of using a fuel that will give the owners of his cars better satisfaction.

4. Stress the following:

   a. Better performance with Ethyl.
   b. Satisfaction of owner.
   c. Smoother engine operation with less cost of repairs over the life of the car.
   d. Standardization and quality of Ethyl Gasoline.
   e. Ethyl is a recognized product proven by the automobile industry and adopted by the oil industry.
   f. Distribution.
   g. Ethyl Gasoline has been used in racing and other events.

5. If very favorable and friendly, ask that the salesmen be instructed to recommend the use of Ethyl Gasoline.

6. Leave Primers.

7. If unfavorable, cultivate him by outside interests and his hobbies.

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B. Service Department

1. Have owner or Sales Manager introduce you to Service Manager.

2. Stress the following:

   a. More power.
   b. Better performance.
   c. A cooler running motor.
   d. Ethyl Gasoline does not slow up combustion.
   e. Will eliminate owners calling on the Service Department for minor adjustments for which no charge could be made.
   f. If unfavorable, call to his attention other Service Managers in his town or Service Managers of Agencies handling his make of car which recommend Ethyl.
   g. If unfavorable, diplomatically call to his attention that it is a reflection on the quality of the material used in his car if it can not use Ethyl as a fuel.

3. Talk with mechanics where possible and give them the same facts on Ethyl.

4. Leave Primers.

This outline will clearly show what we are attempting to do. We will give you a resume of how this can be accomplished.

In your association with the employees of our customers you can pick up information on automobile agencies which will be very valuable to you in your contacts. They will be able to tell you in many instances the attitude of the agency toward Ethyl Gasoline, the names and possibly something of the personalities, characteristics, likes and dislikes of the Owner Sales Manager, Service Manager, and Mechanics. Any such information should be kept in permanent form in a notebook for future reference. In some cases it may be desirable to make your first call on a particular agency with the employee of one of our customers. You will have to be the judge of this procedure.

Data on each make of automobile should be kept in such form that it can be studied prior to a call and referred to during the call if necessary. When making a call on a particular car agency you must have at your finger tips all available information on the car they sell. You have information on different makes of cars which will be supplemented from time to time.

We desire an over-all picture of the attitude of dealers of every automobile manufacturer. We do not want you to devote all of your time to contacting with either Favorable or Unfavorable Agencies. However, if an agency is Unfavorable, you must leave no stone unturned until you have converted them to our way of thinking. In order to do this it may be necessary to cultivate some of the individuals by outside interests or their hobbies. [illegible] they must not be neglected

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Upon entering the establishment ask for the owner or other person you want to interview by name. State your business in a polite diplomatic way. It is the consensus of opinion that the Sales Department or owner should be contacted first. They are interested in performance which sells cars and can outweigh an unfavorable influence of the Service Department. If there is a good reason for it the Service Manager may be contacted first.

In making your approach make it clear that you are not trying to sell a tank wagon load of Ethyl Gasoline but want to give them information which will assist the Agency in furthering their business. The average distributor of cars is not furnished with much information on what is meant by high compression and what its effect on horsepower, economy and performance is, although it is used extensively in advertising and conversation. His idea on fuels is it makes the wheels go and that is about all. He does not understand the difference in gasolines and why his car will operate better on Ethyl. In giving him this information, which vitally affects his business, you are giving him a real service and he will appreciate your call.

If the particular make of car has an optional high compression head, call this to his attention. If he has never installed one of them and made his own tests, secure his cooperation to do so by giving him a demonstration in your own car. There are several optional high compression heads available but they have not been sold due to lack of information on what they will do. If the factory has not given their distributors the information we can assist them in the same way we have done with the Ford B. head.

They may have installed a single H-C head and discarded their use due to improper adjustment of the spark. As you increase compression the spark must be retarded to give maximum performance and power. There are many problems to be considered in high compression but all of them can be overcome if the proper steps are taken. (Refer to Earl Bartholomew's five papers for specific examples.)

Today more than ever before the American automobile owner is demanding better performance and the manufacturers are spending their money to make their car the best performer on the market. The Owner and Salesmen are interested in anything that will give the maximum performance of their car. There is no doubt that Ethyl Gasoline will improve acceleration, hill climbing ability, and other characteristics of the car where maximum power is required.

Some automobile manufacturers still continue to send out their cars with the spark retarded in order to be able to advertise they will operate on any gasoline. Maximum performance can only be secured by a properly adjusted spark. By advancing the spark and using Ethyl Gasoline not only will there be a marked improvement in performance but there will be also an increase in miles per gallon.

Many automobile agencies may state the premium for Ethyl as a reason for not recommending it. When we figure the additional cost in cents or percentage it does look large. That, of course, is not the way to think of it. The average automobile uses 600 gallons of gasoline a year. The additional cost will be only $18.00 per year, $1.50 per month, or about 5¢ per day. There is no accessory which could be purchased for this amount that would produce the increased performance of Ethyl. It is optimally

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would overcome the additional cost.

A new car owner is very proud of the appearance and performance of his car. Irrespective of its cost he does not enjoy seeing an older car leave him at the traffic signal or pass him on a hill. If he uses a gasoline which will prevent such an occurrence he will be better pleased with his purchase.

It is a well known fact that any vibration in a motor will cause undue stress on the bearings, pistons, connecting rods and block. Knock causes these vibrations and its elimination will improve the life of the motor.

Our laboratory has found in their contact with automobile manufacturers that the most interesting phase of our marketing of Ethyl Gasoline is our control over its quality. This should also be interesting to Agencies. You should advise them how this is done. First the base stock for each mix must be tested by us to see if it is a good motor fuel from the distillation, gum content, sulphur content and other characteristics. Then for the amount of lead required to bring it to our standard of anti-knock value. The finished Ethyl Gasoline must be O-K'd by us before it is shipped from the refinery. Our representatives pick up samples from pumps which are sent to our laboratory to determine if there has been any dilution either intentional or unintentional. Some of them may refer to Ethyl Gasoline as "high test" gasoline. Do not let this go unchallenged as they may receive instructions from their home office not to use "high test" gasoline when they have no reference to Ethyl. In such cases explain to them that "high test" gasoline has only one good quality, easy starting, and may have bad qualities such as "gas lock" which would be very objectionable.

Many automobile dealers do not even know today that Ethyl fluid was developed by and for the automobile industry. They all know how much work is done by any automobile company before a new car is put on the market. Ethyl fluid was given the same thorough test over a period of several years. Ethyl Gasoline would never have been sold if it was not beneficial to automobiles or had any detrimental effects.

Before the large oil companies adopted Ethyl fluid for use in their gasoline they saw similar tests and came to the same conclusions.

After all, the public is a "court of last resort" and they have accepted it. This is definitely proven by the increase in sale of Ethyl Gasoline over the last five years.

There will probably continue to be some complaints on Ethyl burning valves, spark plug trouble, etc. Each of these must be thoroughly investigated and brought to a satisfactory conclusion. You have sufficient information to settle a complaint from any reasonable man. If the complaint is unusual and you desire further information, do not hesitate to write the New York office.

Ethyl Gasoline is now distributed by practically all large oil companies and can be secured anywhere in the United States and Canada. The companies selling Ethyl Gasoline represent approximately 85% of the oil industry. One pump in every five is selling a gasoline treated with Ethyl

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In your conversation casually bring in the fact that Ethyl fluid has been and is used in all gasoline where high performance is necessary.

The winners of the Indianapolis Memorial Day Race, Malcolm Campbell, Schneider Cup Race, Gold Cup Race, Army Air Corps, and the Navy use Ethyl. If this is brought in at an appropriate time, it will have a marked influence.

For the Service Manager you must stress that Ethyl Gasoline gives a cooler running motor. Most of them believe more power is only produced by higher temperature. They believe Ethyl Gasoline produces a hotter running motor, and therefore burns spark plugs and valves. Show them there are only so many heat units in a gallon of gasoline. 75 - 80 per cent of this is thrown away through the cooling water, exhaust gases and radiation. Only a small part of the heat content is used as useful power. If Ethyl Gasoline increases the power only 2% there is just that much less heat to be thrown away. That Ethyl Gasoline does give a cooler running motor can be easily proven by inserting a distance thermometer, which reads to single degrees, in the cooling water.

One of the popular fallacies on Ethyl Gasoline is that it slows down combustion. This view is held by many who should know better. Our old illustration of a steam engine governor is about as good as can be used. A steam engine governor does not slow down the revolutions but prevents it from speeding up when the load is lightened. In the same manner Ethyl fluid does not slow down the speed of burn but prevents its truly exploding with the characteristic knock. The fact that Ethyl does not slow down the rate of burn has been proven in several ways. An indicator diagram of an engine where no fuel knock is present shows exactly the same pressure at any point in the cycle whether a good grade of gasoline which does not knock is used, or whether Ethyl fluid is contained in the gasoline. If Ethyl Gasoline slowed down combustion, the pressure would be higher at each point in the power cycle up to the point where the exhaust valve opens. It has also been shown by using a long glass tube and taking a photograph of the burning of a gasoline and air mixture. The length of time required for the flame to burn twenty feet is exactly the same whether the gasoline contains Ethyl fluid or not. The temperature of the exhaust gases, taken at the time the exhaust valve opens, by very accurate means shows that they are slightly cooler if the gasoline contains Ethyl fluid. These facts prove conclusively that Ethyl does not slow down normal combustion. It does, however, prevent the true explosion which is the cause of knock.

If every Service Manager and Mechanic who believes that Ethyl Gasoline burns valves would honestly look for the cause of the burning, our complaints from this would decrease immediately. As a general rule it is perfectly obvious from the operation of the car that the valves are leaking and are burnt. In practically all cases one, two, three or more valves are burnt but not all of them. Suggest to the Service Manager or Mechanic that he check up on the clearances of the valves before starting dissembling. The ones that do not have a proper clearance will be burned and the others will be satisfactory.

When a man purchases a new car he expects it to run like a watch. He has paid his good money and is entitled to satisfaction. If after a few hundred miles of operation he hears a noise which he does not believe should be associated with a sweet running car, he immediately either takes it to the Service Department or begins to blame it on the car. Many owners are not able to differentiate between fuel knock and mechanical noises. If the noise is fuel knock it could be eliminated by the use of Ethyl. This would

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guarantee period is up and the agency attempts to charge for the service, a dissatisfied customer results which may cause a loss of a resale or a sale to friends.

The Service Managers are a distinct class in themselves. They have peculiar likes and dislikes. They can do anything any one else can. Allow the Service Manager and Mechanics to tell you how they overcome their pet service problems. This will promote good will and also give you information which can be used with other Agencies. If they know the Service Manager of a rival Agency gets better results with Ethyl, they will attempt to do the same. Call to their attention all of the men in similar positions who recommend Ethyl. This will convert them as quickly as any other method.

As for comparing the quality of the materials in his automobile with the material used in other cars, this must be done in a most diplomatic manner. There are many men with whom this argument can not be used. You will have to study the personality of your contact very closely before making such a statement. However, it is true.

As for making the contact it should be unnecessary to request you to be diplomatic and not get into an argument which might produce ill feeling This has been done, however. In such cases more harm than good has been done Do not allow anyone to dominate you but do not get into useless arguments. These men have been in the same line of work probably much longer than you have been an employee of this company. They know their subject and it is up to us to enlighten them on ours. Fuel is an important adjunct to the automobile. Without a satisfactory gasoline, the present day automobile could not exist.

REPORTS

In making out the reports it is absolutely essential you give only facts. We believe the forms are self-explanatory. It is necessary for you to weigh all statements in some instances before giving your classifications as "Favorable" or "Unfavorable". If you can not decide on the classification, make it "Unfavorable" and keep after the agency until you are sure they are "Favorable".

There has been some discussion as to a third classification such as neutral or non-commital. We do not believe it necessary as they are either with us or against us. There is, however, a distinct marking. If an Agency uses Ethyl in their demonstrations, recommends it to all owners, and sells it, it should be definitely shown. To classify this Agency mark the report just as you have been doing but in parenthesis, either after or under, place the word "Booster" thus: Favorable (Booster) or Favorable (Booster).

On the report forms the space "Suggestions to increase acceptance of Ethyl Gasoline" in a great many instances is not used. Most men are very willing to tell how other people's business should be run. If any statements on this subject are made, they should be given even though you do not think they have any merit. We are securing some very constructive suggestions and hope to receive more.

Under "Remarks" give any other information which is not covered in the report. If it is necessary to have more space to fully cover the subject

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SALES PROMOTION MEETINGS

It is a well known fact that all people will talk most about the subject on which they have most information. This statement applies more truly to Ethyl gasoline than many other subjects. It has been conclusively proven that those customers of ours who have given their sales personnel information on their brand of Ethyl Gasoline have received the greatest reward in increased sales, and increased profits which result. While we and our customers have devoted time and expense to educational work it is necessary for us to continue our efforts until the oil, automobile industries and public, are each aware of its benefits to each of them.

The field for educational work is really limited only by the population of any country in which Ethyl Gasoline is marketed. In the following we list some of the places where we can secure very definite benefits from meetings:

Our customer employees
Jobber employees
Automobile agency and distributor employees
Truck and bus fleets
Automobile shows
State and County fairs
Noon time clubs
American Legion and similar service clubs
High schools and minor colleges
Major universities (Meetings to be held only by representatives of the Detroit or Yonkers Laboratory.)

There can be no set procedure for arranging meetings. Each field representative should be on the alert to recognize the opportunity to increase the sale of Ethyl Gasoline by holding educational meetings. A large percentage of the people with whom you come in contact have connections through which meetings can be arranged.

ARRANGING FOR MEETINGS

To insure a successful meeting it is necessary that proper groundwork be done in advance. Sufficient publicity must have been given to insure maximum attendance and interest. In case of an oil company the ideal way is for the Sales Manager to notify each of the Division, District or Branch Managers as far in advance as is possible, giving complete information on the purpose of the meeting and what is expected of them. The Division, District or Branch Managers pass the information along to all employees stating definitely that they shall be present and advising them on the part they are to play. Garage employees and others who would be interested should be invited to the meetings by personal contact, telephone, letters or any other appropriate means.

reward in increased sales, and increased profits which result. While we and our customers have devoted time and expense to educational work it is necessary for us to continue our efforts until the oil, automobile industries and public, are each aware of its benefits to each of them.

The field for educational work is really limited only by the population of any country in which Ethyl Gasoline is marketed. In the following we list some of the places where we can secure very definite benefits from meetings:

Our customer employees
Jobber employees
Automobile agency and distributor employees
Truck and bus fleets
Automobile shows
State and County fairs
Noon time clubs
American Legion and similar service clubs
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Major universities (Meetings to be held only by representatives of the Detroit or Yonkers Laboratory.)

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You should visit the man in direct charge of each meeting as far in advance as is convenient. At that time you can go over with him, points to be emphasized and show him it is to his advantage in increasing sales, to have a large attendance. It is quite possible to get ideas from him which will assist you and be also applicable to local conditions.

It is absolutely essential to set up the demonstrator and run it in advance. The demonstrating engine and its accessories must be in perfect working order and in clear view of the entire audience even when you are operating it. There are still those who believe it is a "fake".

Provisions must be made for the entire audience to be comfortably seated. You can not keep the attention of your audience if they are ill-at-ease.

Secure a black board for illustrations.

Have a sufficient quantity of primers for all who desire them.

THE MEETING

Have a very definite time set for the meeting to begin. Start promptly.

Have someone introduce you with proper remarks. If the meeting is for the employees of an oil company have the man in charge of the meeting devote a few minutes to his own company's gasoline stressing why it is the best. You can only talk about Ethyl gasoline as such, without extolling merits of the particular brand. It is up to the company to give their employees information which will sell their particular brand of Ethyl.

You must adapt your talk to the audience. If it is for an oil company give them facts which will convince them that Ethyl has the merits we claim and arguments which will enable them to convert customers to its use. If it is for an automobile organization give facts which they can use. If it is for a noon time club give general information on both the automobile and oil industry as they will not allow any advertising talks.

In advance, make an outline of what you desire to cover in each talk. In any meeting the following should be discussed.

1. History of the automobile industry and why gasoline is used as a fuel.
2. Developments which led up to the discovery of Ethyl fluid.
3. Knock and its elimination.
4. Our control of quality,- distillation,- gum vapor lock and anti-knock value.
5. Demonstration.
6. Usefullness of Ethyl Gasoline.

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5. Demonstration.
6. Usefullness of Ethyl Gasoline.
7. Benefits of increased compression.

8. Trends in the automotive industry toward high compression.

9. Use of Ethyl Gasoline in sport events where maximum quality of a fuel is required.

10. How to increase the sale of Ethyl (For oil companies only).

11. Benefits to be derived from the use of Ethyl Gasoline in present day automobiles.

12. Questions.

You have the information and ability to prepare and make an intellegent sales talk but you should give consideration to the following points to be stressed.

1. Ethyl fluid was developed for and by the automobile industry in the General Motors Research Corporation Laboratories.

2. Ethyl Gasoline is marketed by 100 leading oil refining companies who sell 85% of the gasoline in the United States.

3. More than 20% of all pumps in the U.S. dispense Ethyl Gasoline.

4. Ethyl Gasoline is the recognized anti-knock fuel which made high compressioned, more efficient automobiles possible.

5. Ethyl Gasoline is the only fuel whose quality is also controlled by an organization which is vitally interested equally in the automobile and oil industries. No other such organization exists.

6. Ethyl gasoline is the most extensively advertised fuel in the world. (This for oil companies only.)

7. Get the customer at the Ethyl pump and say "Shall I fill your tank with Ethyl?" (For oil companies ONLY.)

Headings 1 and 2 should not require more than two or three minutes and serve only as an introduction.

The demonstration is still the most effective way of telling our story. You must thoroughly explain the apparatus and what you will do. Tell them it is a special motor designed to show that Ethyl fluid eliminates knock. Add the fluid to some gasoline that they have already seen run in the engine. Eliminate the knock by holding an eye dropper wet with Ethyl fluid in front of the mixing valve. Do not attempt to test gasoline which may be brought to you. The apparatus is a demonstrating engine, not a knock testing engine. If anyone insists that you test gasoline explain in detail the apparatus required. If any of them are not sold on the way the demonstration is made have them come up after the meeting is over and operate the engine themselves.

Watch your audience very carefully. You can tell whether the talk is going over or not. If not, change your approach, bringing in some facts which will interest them.

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Watch your audience very carefully. You can tell whether the talk is going over or not. If not, change your approach, bringing in some facts which will interest them.

Do not take too much time to give your talk. Thirty minutes should be sufficient to tell your story and fifteen minutes for the demonstration. Do not ramble in your talk and speak very plainly in language which can be understood by all those present. Do not use technical terms or high sounding expressions if it is possible to express your thoughts in short concise words. Be Positive, not Negative in all your statements.

Many times there are reporters from local papers present at our meeting. They do not get the facts as we want them presented. Prepare a typewritten talk so that it can be handed to them.

It is necessary for you to hold repeat meetings at which there may be a large percentage of those present who have heard our story before. You must take this into consideration in outlining your talk. "Harnessing the Power of Gasoline" will give you sufficient information to use where you might appear before the same audience many times without the talk becoming boresome. Use new illustrations and facts. The oil and automobile industry is changing. New records established from time to time will assist you. Do not allow yourself to get into a rut on your talks as if you were reciting a memorized paper.

At the conclusion of your talk, open the meeting for questions. In many instances it is desirable to plant questions in order to warm up the meeting. Answer the questions clearly and concisely. Be sure that the party asking the question is satisfied before passing on the next one. Make each one asking a question feel that it is important even though the question may be foolish. If there are any questions asked of a strictly technical character, the answer to which would not be of interest to all of those present, ask that it be deferred until the meeting is over. Do not hesitate to state you do not know an answer to a question if you do not have the information. Make it clear that you will secure the correct answer from the proper source. No one can know everything.

Keep the meeting under your control at all times.

All of the foregoing has been based on formal meetings. There are informal talks that can be of great value if you are at a bulk plant when the tank wagon salesmen are in, a few minutes talk to them will be advantageous. Some automobile agencies have sales meetings every day or at frequent intervals. This is a good opportunity to give them facts. Meetings of any character whether large or small will produce results.

You are expected to follow up the meetings by personal contact with those present. After a meeting, talk with some of those present and find out the points that impressed them. With a service station operator find out how effective the information given was, in increasing sales. By the follow up you can secure pointers to be used in future meetings.

After the meetings give as many of those present as possible, a demonstration in your high compression car. This will show them the effect of high compression and a proper fuel. Many times this has been most effective in selling a large gallonage.

CONCLUSION

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We can only outline to you in a very general way what is to be

done on meetings. You must use your own initiative and good judgment. The meetings are most important and your value to the company must be Measured, to a large degree, in the number of meetings you arrange, and their effectiveness in increasing Ethyl sales.

JOBBER INVESTIGATION

INTRODUCTION

The two types of organizations retailing petroleum products to the motoring public have many points in common as far as their marketing and distributing methods are concerned. However, in the general set-up and manner of receiving supplies they are quite dissimilar.

The first of the two types of organizations, and by far the largest marketer of petroleum products, is the refining company. This organization often referred to as a major company, sells the products refined in their own refineries through their sales department directly to the consuming public by means of company owned service stations and dealers.

The other type of organization, and the one in which this paper is in reference to is the so-called jobber, an independent distributor operating under a name other than the corporate name of the refining company, buying supplies in tank car or barge quantities, storing the product in a bulk plant and retailing it to the public through owned service stations and/or dealers. In some cases the jobber may buy some of the products in tank car quantities, storing them in a bulk plant, and secure the remainder of the supplies in tank wagon from the storage of a nearby jobber or refining company. In a few cases the jobber may act as a pedler, securing all of his requirements in tank wagon from the bulk plant of another company, and distributing it either through service stations or dealers. A jobber may secure his requirements in tank car or larger quantities from a refining company and in many cases market under the brand of that refining company. Other jobbers while buying from the refining company may prefer not to confine their purchases to one company, but purchase through one or more refining companies and market under their own brand name.

HISTORY AND PURPOSE OF LICENSE AGREEMENTS

When Ethyl Gasoline was first placed on the market and made available to the general public there was some question as to whether the sale of this product should be solely to the refining companies or to the refining companies and their jobbers. After much discussion it was finally agreed that jobbers should distribute Ethyl Gasoline but to ensure that the Ethyl Gasoline Corporation would have some control and part in the sale and distribution of this gasoline, jobbers should be licensed in some manner. For this purpose a contract was drawn up which was entitled a "Jobber License Agreement". This License Agreement privileged the jobber to sell and deliver in a specified territory Ethyl Gasoline in quantities less than tank car lots only to users and consumers, or to retain dealers for delivery directly by such dealers to users and consumers, Ethyl Gasoline purchased from a licensed refiner under the brand name of the refining company or their own brand name. It was later found that jobbers distributing Ethyl Gasoline under their own brand name was most unsatisfactory. The jobbers were

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constantly changing their source of supply and identifying the supplying company of Ethyl Gasoline which was found to be below standard was practically impossible. In working to have jobbers mark their pumps correctly, the refining companies were uncooperative due to the fact that they did not know how long they would continue to supply the account and it was therefore not worth their time and expense. Conditions reached such an unsatisfactory state that in order to protect the name and quality of Ethyl Gasoline, the practice of licensing jobbers for the sale of Ethyl Gasoline under their independent brand names was discontinued on January 1, 1929. Later notices of cancellation for all jobber brand License Agreements were sent out, such cancellations to take effect October 1, 1930, so that today all independent distributors marketing Ethyl Gasoline hold a License Agreement covering the sale of this product under the brand name of the refining company from whom they secure their supplies.

At the time the License Agreements were first issued to jobbers, the Ethyl Gasoline Corporation would send to its various refining licensees a supply of License Agreements already executed on the part of the Ethyl Gasoline Corporation. The tank car salesman of the refining company would have a supply of these License Agreements and on the completion of the sale of Ethyl Gasoline would have the jobber execute the License Agreement, in duplicate. One copy of the License Agreement, fully executed, would be left with the distributor for his file, and the other copy forwarded to the Ethyl Gasoline Corporation. Under this procedure we were not aware of a jobber being licensed to market Ethyl Gasoline until the executed copy was received and the jobber in all probability was by that time actively marketing. Later this procedure was amended and the License Agreements were sent out unexecuted on the part of the Ethyl Gasoline Corporation and were not executed until License Agreements were returned to the main office executed on the part of the prospective distributor. On receipt of the License Agreements, both copies were executed by the Ethyl Gasoline Corporation and one copy forwarded to the supplying company to transmit to their customer.

PURPOSE OF INVESTIGATION

This method of executing all License Agreements which were submitted was found to be very unsatisfactory in that all jobbers regardless of their desirability were licensed to market Ethyl Gasoline. To correct this condition a system of investigating all applicants before issuing License Agreements was inaugurated. The reason for the investigation before the issuance of an agreement is to ensure that all marketers of Ethyl Gasoline will be of a high type and will be people who will maintain the quality of Ethyl Gasoline, protect the reputation that the Ethyl Gasoline Corporation have established for their product and will not resort to unethical methods in competing with our other licensed jobbers and refiners.

While gallonage given us by our jobber accounts is a substantial portion of our total gallonage, and is gallonage in every way desirable, still it is not worthwhile at the expense of the reputation of Ethyl Gasoline, or the good-will of our refining licensees. The type of distributor handling Ethyl Gasoline in a community governs very materially the standing of this product and the attitude of our major refining licensees in that community. If the jobber is a reputable business man and an ethical marketer with clean

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unenviable reputation for business dealings and is in every way an undesirable marketer, the standing of Ethyl Gasoline will be lowered and sales will suffer as legitimate marketers will be unable to consistently push the sale of their Ethyl Gasoline.

ROUTINE OF HANDLING LICENSE AGREEMENTS

In order to clarify the handling of License Agreements at the present time, we will follow in detail the course of a License Agreement from its printing to its final disposition. The License Agreement is printed under the direction of the Ethyl Gasoline Corporation and on completion is delivered to the New York office. Here the brand name of the refining company to whom the License Agreement is to be delivered is stamped in the space provided and a bulletin covering the handling of Ethyl Gasoline is attached. A supply of License Agreements, unexecuted, are sent to the refining companies together with an application blank for each two License Agreements. The application blank is in the form of a letter in which the applying jobber gives confidential information as to the extent of his business and makes application for a License Agreement covering the sale of a particualr brand of Ethyl Gasoline. The refining companies in turn supply their tank car salesmen with these forms for use in soliciting of Ethyl Gasoline accounts. After the sales representative has completed the sale, a Jobber License Agreement, in duplicate, and an application blank are given to the jobber for his signature. The completed forms are forwarded by the salesman to the office of the refining company, who in turn forward them to our New York office.

ROUTINE OF INVESTIGATION REQUEST

On receipt of the application and License Agreements by the New York office, the name and address of the jobber is referred to the Division Manager in whose territory the jobber operates, together with the name of the person signing the License Agreement, the brand of white gasoline sold and the brand of Ethyl Gasoline applied for. The Division Manager in turn refers this information to a field representative with the request to conduct an investigation. When the investigation has been completed, and the Jobber Information Report is made out by the field representative, it is forwarded to the Division Manager. The Division Manager, after reading the report, forwards it to the New York office with his recommendation and comments.

HANDLING OF LICENSE AGREEMENTS BY NEW YORK OFFICE

On the Jobber Investigation Report and the information supplied by the Division Manager, the New York office bases their decision as to the issuance of a License Agreement. If the License Agreement is to be issued, both copies are executed, and one copy is returned to the refining company for their transmittal to the jobber. The other fully executed copy is retained for our file. In a case where the License Agreement is not issued, both copies of the License Agreement are returned to the refining company. In all cases the application form is retained by the Ethyl Gasoline Corporation.

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If the License Agreements submitted are from a jobber already licensed to market Ethyl Gasoline, and the submission of the new License Agreements constitutes a change in supplier and brand name only, the same procedure is followed with the exception that the present supplier is requested for information as to their contractual relations with the jobber.

If no contract is in existence, and a favorable report is received, new License Agreements are issued. These License Agreements supersede the former License Agreement and for that reason no formal cancellation of the previous License Agreement is necessary.

In the event an up-to-date report is available when License Agreements are received the investigation is dispensed with and where a jobber has been licensed before, information as to contracts is all that is requested. Some of our refining licensees submit License Agreements in triplicate in order that they may have a copy for their own files. This in no way alters the procedure outlined above, two copies being returned to the refining company.

Jobbers in a few instances will submit License Agreements through one or more refining licensees, before any action has been taken on License Agreements previously submitted, or may submit License Agreements for a different brand of Ethyl Gasoline when former License Agreements have been rejected. In these cases a letter is written directly to the jobber, requesting advice as to the brand of Ethyl Gasoline they would prefer to market before any License Agreement is issued.

Where a jobber discontinues marketing Ethyl Gasoline, or disposes of his business, the License Agreement issued to him is cancelled by letter and the supplying company notified that we no longer list this jobber as holding a valid License Agreement.

Shipments of Ethyl Gasoline by refining companies are not made until the jobber has in his possession an executed License Agreement.

NEED FOR PROMPT INVESTIGATION

It is most important that the investigations requested of the field representatives be taken care of promptly. Every day that a jobber is without Ethyl Gasoline due to the inability of the New York office to issue a License Agreement because of the lack of an investigation report, means gallonage lost that can never be regained. There is also an added worth to early investigations in that our refining licensees are anxious for added gallonage and the prompt handling of License Agreements submitted by them will build additional good-will. In the case of a reinvestigation of a jobber for whom License Agreements have been rejected, the earlier a favorable report can be turned in adds that much gallonage to our yearly total. By no means is it to be understood from this that our standard should be lowered in order to obtain a favorable report.

INVESTIGATION

In making the actual investigation the following procedure should be generally followed

General Survey:

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INVESTIGATION

In making the actual investigation the following procedure should be generally followed

General Survey:

The general survey should cover the background and past and probable operations of the jobber. A field representative should be familiar with the general reputation of the jobber through his contacts in his territory. For further information calls should be made at the offices of refining

licensees and licensed jobbers operating in the same territory as the applying jobber. The requests for information from these sources should be handled as diplomatically as possible, giving as little information as can consistently be done in obtaining the facts desired. It is well not to mention the brand or the supplying company of the Ethyl Gasoline for which License Agreements have been submitted. The information obtained at this time is general reputation of the jobber, reputation in trade, marketing operations, probable gallonage, credit and general standing in the community. If the owner or owners of the company are interested in other lines of business, any information obtained on these businesses and the manner in which they are conducted is pertinent information. In the case of doubtful credit, it is well to call on the bank and learn from them the financial standing of the company and the men interested in it. Where it can conveniently be done, a reading of the Articles of Incorporation of the company give accurate information as to how the business may be conducted. Calls at the offices of oil associations, jobber associations, Regional Code Offices or other organizations of a like nature will often yield information otherwise unobtainable. If the jobber has advertised in local newspapers, a search through the files of the newspaper office will give a good indication of the type of business conducted in the past.

Interview with Jobber:

The representative's call on the jobber is very important and care should be taken by the representative to conduct himself as a gentleman through the entire meeting, regardless of the attitude taken by the man interviewed. It should be borne in mind that the field representative is probably the only person in the Ethyl Gasoline Corporation with whom the jobber will have contact, and it is on his actions that the jobber will base his impressions of our company. It is essential that whether a License Agreement is issued or not that we have the good-will of the jobber. The person contacted should be the one signing the application, the owner or operating manager of the company. A private interview is desirable but should not be made to appear necessary. A talk with the jobber discussing the general marketing conditions in the territory, and the general business of the jobber will place the interview on a friendly basis and at the same time give the field representative a chance to gain a first impression of the man he is to deal with. The information required to make up the Jobber Information Report should be obtained indirectly, except where direct questioning is necessary to obtain required facts. Under no condition should the Jobber Information Report blank be shown to the jobber. On the question of business ethics, conversation will vary according to the type of man interviewed. Care should be taken not to mention the source of information if undesirable conditions are called to the attention of the applicant in order to gain an explanation or refutation. Where necessary, our standing of business ethics should be described as believing in and supporting, where possible, the National Code of Practices for Marketing Refined Petroleum Products. Before leaving the jobber, regardless of whether a favorable or unfavorable report is to be turned in, the representative should explain the story of Ethyl Gasoline, as all oil men, whether marketing our product or not, are constantly being asked about Ethyl

men interested in it. Where it can conveniently be done, a reading of the Articles of Incorporation of the company give accurate information as to how the business may be conducted. Calls at the offices of oil associations, jobber associations, Regional Code Offices or other organizations of a like nature will often yield information otherwise unobtainable. If the jobber has advertised in local newspapers, a search through the files of the newspaper office will give a good indication of the type of business conducted in the past.

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for the field representative to have Ethyl primers available and to leave several of these with the man interviewed.

In the case of a jobber to whom it is believed a License Agreement will be issued, provisions of the License Agreement should be carefully explained, going over in detail the privileges and duties which the holding of a License Agreement entail.

The placing of warning signs on pumps dispensing Ethyl Gasoline should be clearly understood and the necessity for these signs fully appreciated by the jobber. The handling of Ethyl Gasoline should be explained and the jobber cautioned against allowing any form of dilution to occur.

A short sales talk giving the reasons for and the method of pushing the sale of Ethyl Gasoline should be outlined in order that immediately on placing Ethyl Gasoline on the market, the jobber will be informed of the most advantageous manner of selling. The profit to the jobber for diligently pushing the sale of Ethyl Gasoline should be stressed and examples sited of other accounts who have sold a high proportion of Ethyl Gasoline. If the jobber has a business of sufficient size and is willing to cooperate with us and will make the necessary arrangements for the holding of a meeting and demonstration, tentative arrangements may be made for such a meeting at a later date, the meeting of course to be held only in the case a jobber License Agreement is issued.

The field representative should be sure to advise that the final disposition of the License Agreement is in the hands of the New York office, and during the interview should refrain from making any statement which might be taken to construe that License Agreements would be either executed or rejected.

INSPECTION

Either before or after the interview with the jobber a number of company owned service stations and dealers should be inspected to gain a thorough knowledge of their appearance and character. Bulk plants should also be inspected in company with the person interviewed and any recommendation as to the change in piping arrangements should be made at that time. Care should be taken, however, in wording the recommendation so that the jobber will not go to the expense of making changes under the impression that License Agreements will be executed if such changes are made. The recommendation should be stated in such a manner that when License Agreements are executed the piping lay-out should be altered to avoid any mixing of Ethyl Gasoline with other products. In the case of a supplementary investigation where the jobber is handling Ethyl Gasoline, the Ethyl pumps should be inspected for proper markings and if believed advisable samples taken.

JOBBER INFORMATION REPORT

After the investigation the information procured should be entered in a notebook for reference at the time of making out the Jobber Information

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JOBBER INFORMATION REPORT

After the investigation the information procured should be entered in a notebook for reference at the time of making out the Jobber Information Report. The report itself should be written the same day the investigation is completed and forwarded promptly. Any benefit occurring from a prompt investigation is of course lost if the report is not received in the New York

office soon after the investigation. The actual writing of the report should be done in a very careful manner. First, in order that License Agreements submitted may be handled correctly and second, in order that reliable information on the jobber will be available in the file.

The two boxes at the top of the sheet marked "Supplementary Investigation" and "Original Investigation" denote whether the jobber has ever been called on previously. If it is the first contact made by any member of our organization, of course a check is to be inserted in the Original Investigation box. If the jobber has been called on by an Ethyl Gasoline representative, regardless if the representative making the report has not called before, the Supplementary Investigation box should be checked.

The first line with blanks for Division, Headquarters and date is self-explanatory.

The blanks with the name of the jobber should be filled in with the names as given on the investigation request. If there has been any change in the name of the company, or if the name as given by the refining company is incorrect, or no longer applies, the correct name should appear directly after in parenthesis.

Address - give street, town and state of the office of the jobber.

Has jobber been issued License Agreement - if the jobber holds a License Agreement, or held a License Agreement at any time a mark is to be placed over the "yes", and if possible, the brand name of the Ethyl Gasoline covered by such License Agreement. If no License Agreement has been issued a mark over the "no" will suffice.

Jobber has not applied for License Agreement - if the jobber has applied for a License Agreement the "not" is to be crossed out and the brand name of the Ethyl Gasoline applied for is to be written in the space following the statement. In the case of a supplementary investigation where there is no change in the License Agreement, or in the case of an investigation of a jobber not handling Ethyl Gasoline nor wishing to handle Ethyl Gasoline, the blank may be left open.

White gasoline supplied by ....Brand....Tank car or Tank Wagon - give information as to the gasoline being marketed at the time of the investigation, not the manner or brand of gasoline to be marketed in the future.

The lines covering the premium gasoline and the Ethyl Gasoline are to be filled in in the same manner as the spaces for white gasoline.

Gallonage for one year preceding investigation - this information is important and care should be taken to see that the information given is correct. Where a jobber has not been in business for an entire year, any gallonage figure that can be obtained, together with the period of time this figure covers, will be a great help in making a final decision as to the issuance of a License Agreement.

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How long has jobber been in gasoline business (approximate) - this is self-explanatory with the exception that if the jobber is just starting

the wholesale purchasing of gasoline and has been operating as a dealer, the period of time covered while operating as a dealer should be noted.

Bulk plants - give number and location and if all are not to bulk Ethyl Gasoline, note this in some manner.

Company owned service stations ....number....General Appearance - the appearance is the average of all the stations compared with the type of stations found in the same locality.

Dealers....Number....General Character - the character applies to whether they are service stations; curb pumps, garages or automobile dealers and their desirability.

Does jobber deliver by tank wagon to consumers - in other words, does jobber deliver in his tank wagon to farmers, commercial accounts or private accounts for use exclusively by the purchasers.

Condition of Ethyl pump markings - this will apply to jobbers who are handling Ethyl Gasoline and can be answered only if the equipment has been inspected.

If jobber contracted for Ethyl Gasoline supply and Expiration Date- this information can be obtained from the jobber at the time of the interview with him.

Present percentage Ethyl sales to total sales - this of course applies to accounts handling Ethyl Gasoline and is self-explanatory. If the jobber is doing a large commercial business, the percentage of Ethyl sales to total sales at the bulk plant and the percentage of Ethyl sales to total sales for retail trade should be given.

Have jobber's employees full knowledge of Ethyl Gasoline;
Would Ethyl demonstrations aid jobber and employees - the answer to these two questions is left to the judgment of the field representative and should be answered after talking with the jobber and a portion of his employees. Information as to whether a jobber would be willing to carry the expense and the work of arranging a satisfactory meeting should be obtained and also whether it would be worth the expense and the time of the field representative to give such a meeting.

Does jobber push sale of Ethyl Gasoline - if a supplementary investigation, this question can be answered by comparing the percentage of sales of the jobber with the average for the state; also, by stopping in one or more of the service stations supplied by him and noting the attendants' attitude toward the sale of this product. In an original investigation the field representative can give his impressions as to whether the sale of Ethyl Gasoline will be pushed by the jobber.

Reputation in Trade - this is the concensus of opinion of the marketers who are marketing in competition with the jobber. These opinions are obtained at the time of the field representative's call on the various competing marketers.

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Business Ethics - this question can be answered only if the field representative has obtained sufficient information to be sure of his opinion.

Ethics of the jobber is based on the territory in which he is marketing and the conditions surrounding the sale of gasoline by other Ethyl Gasoline distributors. Care should be taken, if possible, to find out the instigator of any practices which tend to unfair competition. Business Ethics is a relative quality and no hard and fast rule can be given to govern all cases. Information given to field representatives and picked up in the various contacts should be weighed carefully before a final decision is reached. One of three words - Good...Questionable...or Unethical is to be used in answering this question.

Jobber visited last on....Reported last on - this cannot be given in all cases, but an attempt should be made however to find the information desired. Where a field representative has been in the territory for some time this information should be available.

The reverse side of the report is to be used to give any information pertinent to the investigation which is not covered by the questions. Information such as special accounts supplied by the jobber, past history, number of companies selling Ethyl in the same territory, brand of white gasoline, premium gasoline and Ethyl Gasoline to be marketed and kindred subjects, location of the nearest bulk plant handling the brand of Ethyl Gasoline applied for, if the Ethyl gallonage of the jobber is small, should be given. If a sample of Ethyl Gasoline has been taken, and submitted as a Class II sample, this information should also be noted. In some cases it is advisable to attach a supplementary letter to the report giving information that will be of value in making a decision as to the issuance of a License Agreement.

SUPPLEMENTARY INVESTIGATIONS

The same general procedure of investigation and writing of the report is to be used in an original or a supplementary investigation. If a reinvestigation is requested due to either disagreement by the refining licensee with our decision, or due to insufficient information on which to base a decision, the reinvestigation should be complete, not omitting any source of information. It is especially important that all investigations be conducted carefully in order that additional investigations will not be necessary.

Supplementary investigations should be made periodically and reports sent in. This will allow the field representative to better organize his work in that investigations will not be requested if an up-to-date report is in our file, thus allowing any special or routine work to be carried on uninterrupted.

SALES PROMOTION CALLS

If a License Agreement is issued a call on the jobber going over the License Agreement, our requirements as to the pump markings and strongly cautioning against dilution will often save considerable time and expense later. At this time again impress on the jobber the advantages of Ethyl

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Frequent calls on our licensed jobbers to discuss with them new developments in the automotive world and the advantages in pushing the sale of Ethyl Gasoline, will materially increase the Ethyl gallonage of these accounts; also, such calls will enable the field representative to make sales promotion contacts which otherwise might be missed. The average jobber does not have as complex an organization as our major refining companies, and sales promotion efforts will be more quickly felt and in many cases more effective. The selling of jobber accounts on the advantages in pushing the sale of Ethyl Gasoline is one way that the field representative can increase the percentage of Ethyl Gasoline sales to total gasoline sales in his territory.

REJECTED ACCOUNTS

The field representative in traveling through his territory should bear in mind the various accounts which have applied for License Agreements but for some reason have been rejected. In many cases the rejection of License Agreements and the subsequent interest taken in the account by the prospective supplier will change the marketing operations of a jobber sufficiently to justify the issuance of a License Agreement; also through work on the part of our field representatives some accounts will improve and become assets in the marketing of Ethyl Gasoline.

CONCLUSION

The investigation of jobber accounts is not a routine business each case has its peculiar twists and on the field representative's initiative and good judgment depends the type of jobbers licensed and the amount of good accomplished. Investigations should be treated as a means of obtaining information not only on the jobber involved, but on the marketing of all companies in the territory, and also, as the means of promoting the sale of Ethyl Gasoline. How the work is done is in a large measure left in the hands of the field representative and his ability to get the facts and correlate them is shown in the jobber report submitted. Jobber investigations are important and on the field representative's ability to do this work is based, in part, his standing in the Ethyl Gasoline Corporation.

December 1, 1931

ETHYL GASOLINE CORPORATION

ROUTINE TO BE FOLLOWED IN THE COLLECTION AND IDENTIFICATION OF SAMPLES

The collection of field samples for test purposes at our laboratories is one of the most important duties of the field representative. By this means we are able to judge whether our licensees are sending from their refineries Ethyl Gasoline which meets our anti-knock standard. We can determine, if such Ethyl Gasoline left the refinery meeting our standard, whether it was diluted in the field. We can at all times through sample testing be in a position to know the quality of premium products competing with Ethyl as well as the quality of non-premium gasolines marketed by our customers and their competitors.

We are able to arrive at these conclusions only if this work from start to finish is correctly carried out. The first thing of importance is judgment on the part of the field representative as to where he shall collect samples. After taking the sample he must be careful to properly identify it before shipping to the laboratory. Then the sample reaches the laboratory it is subjected to all routine tests as well as specific tests requested by the field representative. The results of these tests are carefully tabulated in reports which come to the New York Office and in turn go back to the division manager and the field representative.

Since these instructions deal only with the collection of samples we need not discuss testing of the gasoline at our laboratories. We wish, however, to impress upon all field representatives that our laboratories have built up an elaborate system where gasoline testing has reached a high degree of accuracy. They have but one job toward which all their efforts are devoted and it is only reasonable to conclude that they should and do excel in the testing of gasoline. Every field man can without qualification accept the tests of our laboratories as true results on the gasolines which are submitted to them.

CLASSIFICATION OF SAMPLES

We have classified routine samples sent in by field representatives under four separate and distinct classes. Each of these represents a particular type from which certain information may be drawn. All field samples should therefore fall within one of the four following classes.

CLASS I - ROUTINE SAMPLES WHICH ARE PICKED UP TO GIVE US GENERAL INFORMATION ON THE QUALITY OF ETHYL GASOLINE AS SOLD BY OUR LICENSEES

Class I samples are those samples which are taken at random but which are believed to be samples typical of particular brands of Ethyl Gasoline. Class I samples may be further broken down into three groups, namely, those taken from

one of the most important duties of the field representative. By this means we are able to judge whether our licensees are sending from their refineries Ethyl Gasoline which meets our anti-knock standard. We can determine, if such Ethyl Gasoline left the refinery meeting our standard, whether it was diluted in the field. We can at all times through sample testing be in a position to know the quality of premium products competing with Ethyl as well as the quality of non-premium gasolines marketed by our customers and their competitors.

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company owned stations of our refining licensees, those taken from dealers supplied directly by our refining licensees and those taken from jobbers or jobbers' dealers. We may regard the samples taken from refiners' company owned outlets as our key samples of Class I. These are the most important in judging the quality of the Ethyl Gasoline as emanating from the refinery. These routine samples taken from refiners' dealers and jobbers will act as supplementary information to that which is gained from key samples.

Class I samples are the most important group of samples which are requested. These give us the knowledge on how our refining customers are maintaining our standard; whether their gasoline is above our standard and if it is a stable gasoline which continues to hold its anti-knock value after lengthy storage in the field. These samples also give us our first indication of dilution by any particular marketer.

The field representative will be instructed from time to time by his division manager, the number of Class 1 samples, by brand, which should be taken from company owned stations, from dealers and from jobbers.

CLASS II - SAMPLES TAKEN BECAUSE OF SOME SPECIFIC SUSPICION OR COMPLAINT, SUCH AS SUSPECTED DILUTION, COMPLAINTS ON ANTI-KNOCK VALUE, COMPLAINTS ON POOR STARTING, ETC.

The definition of Class II samples is self-explanatory and samples should be placed therein if there is any suspicion of the gasoline. IT IS IMPORTANT THAT THE FIELD REPRESENTATIVE SHALL NOTE ON HIS REPORT THE REASON OR REASONS FOR PLACING A SAMPLE IN CLASS II. For instance under remarks he should note "Suspected Dilution", "Complaint on Knocking", "Complaint on Starting", etc. It is also important that the field representative note on the sample report any specific tests which he thinks should be run. For instance he should request (under remarks) "Distillation", "Lead Analysis" or "All Tests". He should not request "All Tests" unless it is necessary to have these results for a definite purpose in mind. Class II samples will be given preference at time of testing. In other words, our laboratories will expedite tests on this type of sample so that the results obtained therefrom may be reported back to the division manager and thence to the field representative at the earliest possible moment.

CLASS III - SAMPLES COLLECTED ON SPECIFIC INSTRUCTIONS FROM NEW YORK OR FROM A DIVISION MANAGER

The definition of this class is self-explanatory. Samples will be requested from time to time by the division manager when particular campaigns are put on to determine certain characteristics of any type gasoline. Instructions to the field representative to collect a given number of such samples will have no bearing whatsoever on samples of other classes but will be picked up at the direction of the division manager. THE FIELD REPRESENTATIVE SHOULD NEVER COLLECT OR IDENTIFY SAMPLES AS CLASS III AT HIS OWN DISCRETION. SAMPLES SHALL ONLY BE IDENTIFIED AS CLASS III WHEN SPECIFIC INSTRUCTIONS FROM THE DIVISION MANAGER HAVE BEEN GIVEN TO PLACE THEM IN THIS CLASS.

NOTE: Classes I, II and III refer to samples of Ethyl Gasoline.

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NOTE: Classes I, II and III refer to samples of Ethyl Gasoline.

CLASS "C" - SAMPLES PICKED UP TO DETERMINE THE QUALITY OF COMPETITIVE PREMIUM GASOLINES AND/OR NON-PREMIUM GASOLINES SOLD BY OIL COMPANIES WHO MAY OR MAY NOT BE LICNESED TO MARKET ETHYL GASOLINE

e must at all times know the quality of all gasolines which compete with Ethyl. This applies not only to premium gasolines but non-premium gasolines as well. The field representative will be instructed from time to time by his division manager the number of "C" samples which shall be picked up as a routine duty. He may, however, at his own discretion collect a sample occasionally when he may come in contact with any product of supposedly high anti-knock value. When any samples are collected by the field representative on his own initiative he shall make a separate report to his division manager on the sample.

REGULARITY OF SAMPLE SHIPMENT

The laboratories of the Ethyl Gasoline Corporation have been designed and are manned to test a certain number of samples. For their efficient operation it is important that samples be sent in at a uniform rate. If this is done they will be busy at all times rather than having more samples than they can test on one day and fewer than they could test on another day. For this reason it is of utmost importance that field representatives ship their samples on the day those samples are collected. This should be strictly adhered to and each field representative should set for himself the day on which particular samples will be taken. We mean that as nearly as possible the field representative should consider the total number of samples which he must collect each week and time the shipment of these samples at regular intervals so that there will be a constant flow of samples to the laboratories. The tendency of any representative to minimize the importance of regular shipment of samples, will place such field representative open to serious criticism.

SAMPLE REPORTS

Prior to these instructions the sample tag has been the only means of identification of the sample. This method was found to be objectionable due to obliteration during shipment, of the identification marks on the tag. Under this system it was also necessary for the field representative to make a report to his division manager on the samples which he collected. A new system has been devised for identifying samples for the laboratory and reporting them to the division manager which should overcome all present objections.

Each representative will be supplied with a pad of reports entitled "FIELD REPRESENTATIVES SAMPLE REPORT". The form of this report is attached hereto. These forms will be made up in quadruplicate with pages colored white, blue, pink and canary yellow in accordance with our standardized color scheme on reports. The white copy is to be retained by the field representative. The yellow copy will be mailed by the representative to the laboratory to which the sample is directed immediately upon collection and shipment of the sample. The pink and blue copies will be mailed to the division manager. Forwarding the division manager's copies to him will be the

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The tag attached to the sample at time of collection need only contain the sample number and the name of the field representative. IT IS IMPERATIVE THAT THE FIELD REPRESENTATIVE MAKE SURE THAT THE NUMBER ON THE SAMPLE TAG COMPARES EXACTLY WITH THE NUMBER ON THE SAMPLE REPORT. If the number on the sample tag does not compare with the number on the sample report, the sample is misidentified and is worse than worthless to us.

The information requested on the sample report follows closely the information required prior to this time on the sample tag. We will go over each blank on the report, however, so that each field representative may fully understand the information which is necessary.

Division	Self-explanatory
Date Shipped	Self-explanatory
Sample Number	Self-explanatory
Brand Name	Self-explanatory - In reporting "C" samples (not Ethyl Gasoline) strike out the word "ETHYL" on the report.
Blending Company	The blending company is that company which manufactures the Ethyl Gasoline. It is possible that one of our refining licensees may purchase Ethyl Gasoline manufactured by another refining licensee, but in this space should be recorded the name of the oil company which actually manufactures the gasoline. In most cases the blending company is that company whose brand is used but there may be exceptions to this.
Refinery Location	After a field representative gains sufficient knowledge of activities in his territory he usually knows the refinery from which each particular brand of Ethyl Gasoline is shipped but this information may be obtained from the proper representatives of the company whose brand is used.
Marketer (Wholesaler)	The marketer represents the company who handles the gasoline in the locality in bulk quantities. In the case of a refining licensee the marketer may be the company whose brand occurs above. It may or may not be the company which manufactured the Ethyl Gasoline or it may be a jobber.
Pump Owner (Retailer)	This should give the name of the company or individual retailing the gasoline. It may be a refiners company owned station, a jobbers company owned station or a dealer of either a refining licensee or a jobber licensee.

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Location	Self-explanatory
Town and State	Self-explanatory

Class	The sample should be classified in accordance with instructions and the number or letter noted. In other words the sample should be classified as "I", "II", "III" or "C".
Reason for Classification	If a class I sample it will only be necessary to write "Routine" as reason. If Class II the reason for suspicion should be given. If Class III should simply be noted as "Requested' giving the date of the request. If Class "C" it should be listed as routine unless the sample has been picked up at the discretion of the field representative. If this has been done the representative should give the reasons for his collection of the sample.
Shipped to	Give the location of the laboratory to which the sample is shipped.
Remarks	Give any special tests to which sample should be subjected or any other remarks having to do with the sample.
Signed	The field representative's signature.
Laboratory Report	This space has been allowed so that the field representative may note upon his records the results which were obtained by the laboratory on the sample. He will receive statements from time to time from his division manager on the results of the samples he has collected and these should be noted in this space provided for the laboratory report.
	The reverse side of the sheet should be used for any additional remarks to be made to either the laboratory or the division manager and the representative making out the report should write "Over" at the bottom of the page.

If a field representative is in doubt as to any of the statements occurring in these instructions he should immediately write his division manager for a more detailed explanation.

These instructions are dated December 1, 1931, and supersede any instructions relating to samples given prior to this date.

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EXHIBIT 17-D

PAPER NUMBER I

JOBBERS

The purpose, procedure routine instruction for the handling of jobber work by the field representative is fully covered in a paper on the subject given in the field representative's manual which was issued by the Sales Department in December of 1931. As we review the jobber picture during the year of 1932, we find that there are no additions or corrections to the instructions set forth in the manual. We do feel however, that not only the field representatives, but the division managers themselves, should make a practice of reading the jobber procedure at least once every three or four months so that they may keep themselves familiar with the points contained therein, which in some cases have not been followed to the letter during the past year.

Because there are no additions or corrections to procedure, as stated a year ago, we may devote our entire time to refinements of the handling of jobber licences.

LACK OF INFORMATION

The activities of our field representatives in the investigation of jobbers still leave much to be desired in the manner in which their reports are made out. It is entirely possible that investigations are made in accordance with our instructions but if the investigation itself is properly made it is not reflected in the report of the field representative to his division manager. Reports continue to be received in the New York Office which are not completely filled out. Many times pertinent information which might be the deciding factor in the handling of a jobber application has not been covered by the field representative. Certain divisions have demonstrated that their representatives have been able to secure all of the information requested on the jobber investigation report and as far as the Sales Department is able to determine there is no reason why every blank space on the jobber report should not be fully made out by the field representative. All of the information requested is available to the investigator if he will take the time to secure it.

SUPPLEMENTARY REMARKS NECESSARY

Even a greater omission on the part of certain field representatives in making jobber reports is the fact that they give little or no supplementary information other than that requested on the report itself. This information is most always of a very helpful nature to the New York Office in deciding whether or not a jobber license will be issued. We want every field representative to note under remarks on his report those things which pertain in any way to the applicant's business dealings,

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We notice that some field men make a practice of commenting on the business ethics of the jobber applicant in their remarks contained on the jobber report. This is unnecessary and undesirable since it is merely a repetition of the facts called for on the face of the report.

SKELETON REPORTS NOT ACCEPTABLE

We have noticed during the past few months that a number of our field men have instituted a practice of making out skeleton reports where in their estimation it was not necessary to give full details. By way of example let us suppose that the John Doe Oil Company has discontinued the sale of Ethyl Gasoline. One of our field representatives when calling on the John Doe Oil Company is advised that Ethyl Gasoline is no longer being sold at the jobber's outlets and as a result he sends to us a report bearing nothing but the name of the company and the statement that the John Doe Oil Company has discontinued the sale of Ethyl.

It should be almost obvious to both the field representative and the division manager that this is very much a waste of money. The expense of making the jobber investigation is not justified by the simple remarks that the jobber has discontinued the sale of Ethyl. We want a full and detailed jobber report on every jobber who is investigated. This information is most necessary to keep our files accurate and reasonably up to date at all times.

In the case just mentioned there is no way in which we might have full information if the jobber decided that he desired to resume the sale of Ethyl. A new investigation would be necessary with consequent expense which might have been eliminated.

Every field representative therefore must make a practice of making a full report on any jobber when he is on location. We want this regardless of the doubts he may have on the advisability of reporting fully.

CLARIFY METHOD OF DELIVERY

Many times during the past year it has been necessary to carry on correspondence with our division office and in some cases from the division office to the field representative, because the method of delivery by which a jobber secures his Ethyl Gasoline has not been clarified in the report. The field representative should state how the jobber expects to purchase his supplies of Ethyl Gasoline, on all original investigations and he should state how it is being purchased on all supplementary investigations. He should first of all mention whether supplies are being purchased by full or compartment cars. In the absence of car lot purchases he should state whose tank truck supplies Ethyl Gasoline to the jobber's

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is to be or is supplied, by his own tank wagon or the tank wagon of a refining licensee or another jobber. You are aware that upon this one fact alone may depend the necessity for a marketer to hold a jobber license. Where a jobber secures his supplies of Ethyl Gasoline by tank wagon it must therefore be noted on the report as to whether he desires to haul the product in his own equipment.

TRUCK AND TRAILER DELIVERIES IN LARGE QUANTITIES

During the past year we have received a number of reports covering the advent of truck and trailer deliveries from refinery to jobbers. Although this is a fairly complicated problem it may be overcome by classifying the manner and circumstances of delivery. First it must be understood that our License and Sales Agreement with refiners states that deliveries of Ethyl Gasoline may be made in tank car quantities to holders of a valid and existing jobber license. Some of the large truck and trailer conveyances which are now being used are certainly to be considered as moving the gasoline in tank car quantities. It shall therefore be our consideration that deliveries by large truck and trailer units may be made only to licensed jobbers. In other words whether the jobber secures his supplies by tank car or truck and trailer unit, the quantities involved are essentially the same and the necessity for licensing are likewise the same.

We have recently had some reports from our field staff that refining licensees are making deliveries of Ethyl Gasoline in large quantities to jobbers who had been rejected for jobber license. These refining licensees apparently looked upon their deliveries by truck as an ordinary tank wagon delivery to a dealer for whom a license is unnecessary.

During the recent A. P. I. Convention in Houston, executives of our company were advised that literally hundreds of jobbers are being supplied with Ethyl Gasoline in large quantities by means of the truck and trailer unit. Our customers stated that not only were licensees making shipment from their refinery or terminal points in their own units but in units owned or leased by the jobber. Some refining licensees are making such deliveries without ever making application for jobber license for the recipient of the gasoline while some are making deliveries to jobbers who have been rejected for jobber license. Undoubtedly this practice if confirmed is responsible for many unethical marketers now handling our product.

As a result of this information we want every division manager upon his return to his division to write to each of his representatives requesting them to conduct a survey immediately on the delivery of Ethyl Gasoline in large quantities to jobbers who do not hold an executed jobber license. We shall expect to receive a full report on this subject from each division manager not later than January 15, 1933.

This practice must be eliminated and our division managers

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This practice must be eliminated and our division managers must fully inform our refining licensees that we consider the quantities involved sufficiently large so that deliveries of Ethyl Gasoline whether

by tank car or large truck units may be made only to holders of a valid jobber license.

INDEPENDENT TRUCKMAN UNDER SEAL REGARDED AS COMMON CARRIER

When Ethyl Gasoline is delivered by truck and trailer unit owned and operated by a refining licensee there is no particular problem involved as this means the delivery is similar to deliveries of Ethyl Gasoline in an owned or leased tank car.

We must then consider the independent truckman who hauls Ethyl Gasoline from the refinery to a jobber outlet or bulk plant. If this truckman secures a quantity of Ethyl Gasoline at the refinery or terminal storage point of the refining licensee and delivers the entire quantity under seal to the outlet or bulk plant of the jobber (whether the shipment be intra-state or inter-state) we will consider the truckman as a common carrier and therefore not eligible as the holder of a jobber license. In cases such as these a division manager shall make certain that delivery is made to the truckman under seal and the product delivered directly to the jobber. If the refinery where the material is loaded is in a different division from that where it is to be unloaded, the division managers should correspond and should advise both the refiner and the jobber that we recognize the truckman as a common carrier but that the product must be transmitted under seal.

RECOMMENDATION

We have reason to believe that since some of our representatives have failed to make recommendations as to the issuance of a jobber license they have intended their statements on business ethics or reputation in trade as a recommendation in itself. This action is certainly not in accordance with the instructions which have been given. The face of the report should be fully made out but the recommendations of the field representative should be given elsewhere.

When statements regarding reputation in trade and business ethics do not agree an explanation should be given to us.

SUPPLEMENTARY REPORTS

CHECK FREQUENCY OF REPORTS

We want first of all to congratulate our division managers and field representatives on the quality and number of supplementary reports

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CHECK FREQUENCY OF REPORTS

We want first of all to congratulate our division managers and field representatives on the quality and number of supplementary reports which have been received in the New York Office during the past six months. The reports have been very good for the most part and we believe that our division managers have now set up proper machinery for checking frequency of reports so that with few exceptions we have at any time most of the

information necessary on any jobber licensee. If any division manager has not set in motion a procedure for checking his field representatives on late reports we urge that this be done at once.

THE SUPPLEMENTARY REPORT IS VALUABLE

From time to time we have heard statements made by field representatives and division managers that the supplementary report required too much time and was not of sufficient value.

After a year trial of this procedure you may rest assured that the New York Office is confident of the value of the supplementary jobber report.

For instance, during the past six months many jobbers in sparsely populated sections have felt it inadvisable to continue the marketing of Ethyl Gasoline. As a result we continued for a month or two to list these jobbers as active marketers of Ethyl Gasoline. Gradually, however, when supplementary reports were made it was possible for us to go on record as to the cancellation of inactive jobber accounts and consequently we believe that our files are almost entirely up to date on that subject.

We have through these supplementary investigations been able to correct the Ethyl marketing picture to a considerable extent and have succeeded in eliminating from our jobber lists some of our former accounts who were not a credit to us as licensees of the Ethyl Gasoline Corporation.

Statements on gallonage and number of outlets have placed us in a position to intelligently correspond with our refining licensees as to quantities of shipments to jobbers as well as methods of delivery. Later on we will discuss the standardization picture generally and will include the subject of maintenance of our specifications among jobbers. You may be sure that the supplementary jobber report has placed us in a position to more carefully follow the activities of a jobber as regards his standardization problems than we would have been under the system used prior to 1932.

The supplementary report has placed the division manager in a position to straighten out many small irregularities which have been noted by field men regarding the use of wrong brands, peddlers hauling from a jobber's storage, etc.

STUDY SUPPLEMENTARY REPORTS FOR IRREGULARITIES

We point out the above facts not merely as reasons why supplementary reports are necessary but to indicate to our division managers the use which is being made of them. Not all of our division [illegible] of these supplementary reports while

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secured as much information as might be possible, we suggest that you watch this matter carefully in the future so that you may secure that information which is available from the field representatives in some divisions and which is used by some division managers to keep our jobber business on a solid foundation. In the last three or four paragraphs just preceding, we have stated that the supplementary report has brought to light many irregularities. We will not attempt to advise a division manager whether such irregularities should be corrected by the field representative, the division manager or the New York Office. Every case must be based on its own merits but we believe the division manager should instruct his representatives that they are normally to correct any irregularities or infractions which may come to their attention. It is also important that such correction be noted on the jobber report. If the field representative is not successful in the correction of irregularities he should place the matter in the hands of his division manager. In most every case it will not be a difficult matter for such matters to be handled to our satisfaction by the division manager but we ask that if any case comes up where full satisfaction is not received, the division manager shall write the New York Office in full detail on the situation.

STANDARDIZATION

It shall be a part of the duty of each field representative to educate our jobbers on the methods of maintaining better standardization among their group. By this we mean that the field representative must impress upon the jobbers within his territory that we are constantly sampling their product and that we have at our disposal facilities for knowing whether their gasoline meets with our specifications. We do not mean by this that any field representative shall attempt to wield a big stick but rather we believe he should discuss with the jobber those questions which are vital to the maintenance of our standard, such as bulk storage piping arrangements, length of storage, quantities of purchases and quantities of deliveries.

PIPING LAYOUTS AT BULK

We will cover this subject more fully in our consideration of standardization of Ethyl Gasoline but we do wish to call to the attention of every division manager the fact that although we have upwards of five thousand jobbers in our list, we have had practically no cases reported to us where piping layouts at jobbers' bulk plants have been responsible for dilution of Ethyl Gasoline. Surely there must be more of these.

The field representative must therefore make it a practice to inspect thoroughly the bulk plant piping arrangement of all jobbers on original investigations and he must make periodic examinations of the bulk plant on every second or third supplementary investigation. This [illegible] new bulk plants or

instruct his representatives that they are normally to correct any irregularities or infractions which may come to their attention. It is also important that such correction be noted on the jobber report. If the field representative is not successful in the correction of irregularities he should place the matter in the hands of his division manager. In most every case it will not be a difficult matter for such matters to be handled to our satisfaction by the division manager but we ask that if any case comes up where full satisfaction is not received, the division manager shall write the New York Office in full detail on the situation.

STANDARDIZATION

It shall be a part of the duty of each field representative to educate our jobbers on the methods of maintaining better standardization among their group. By this we mean that the field representative must impress upon the jobbers within his territory that we are constantly sampling their product and that we have at our disposal facilities for knowing whether their gasoline meets with our specifications. We do not mean by this that any field representative shall attempt to wield a big stick but rather we believe he should discuss with the jobber those questions which are vital to the maintenance of our standard, such as bulk storage piping arrangements, length of storage, quantities of purchases and quantities of deliveries.

PIPING LAYOUTS AT BULK

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The field representative must therefore make it a practice to inspect thoroughly the bulk plant piping arrangement of all jobbers on original investigations and he must make periodic examinations of the bulk plant on every second or third supplementary investigation. This is particularly necessary if a jobber has absorbed any new bulk plants or if he has rebuilt or changed the location of an existing bulk plant.

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DECREASE LENGTHY STORAGE

The field representative must check with the jobber on his length of storage of Ethyl Gasoline as well as the quantities which he purchases. If these are too high by purchase in full tank car they must be reduced to compartment car quantities and if the jobber is not in a position to purchase his supplies in compartment car quantities he should then make some arrangement to secure his supplies in his own tank wagon from a nearby bulk plant of a refining licensee or another jobber licensee.

EDUCATE THE JOBBER

We believe that many times our field representatives are prone to take for granted the fact that jobbers fully understand the deteriorating properties of gasoline. Many of them do not realize that length of storage has any effect on the maintenance of quality. Because of this it must be the duty of the field representative to explain fully to the jobber the things which must be done to maintain quality for his benefit as well as ours.

NOTE SAMPLE TEST RESULTS ON SUPPLEMENTARY REPORT

When samples of Ethyl Gasoline are picked up from jobber outlets for dilution they should be noted on the jobber report. Such action will cause the division manager and the New York Office to check jobber reports against sample reports immediately and will help us in eliminating dilution among jobbers. The field representative should give the laboratory number and the date on which samples are picked up and should by reference to previous supplementary reports give the date and the laboratory number if possible on all previous samples.

SALES PROMOTION

The jobber report requests information as to whether the jobber pushes the sale of Ethyl Gasoline and also if demonstrations or talks would help the jobber and his employees in promoting the sale of his particular brand of Ethyl. We know that many of our division managers make a practice of putting on a demonstration for jobbers and their employees but this is rarely noted on the supplementary jobber report nor do our representatives state whether it has had any effect on the jobber's tendency to push his Ethyl sales. It is true that in general our jobbers' sales are much lower in percentage of Ethyl to total than those of our refining licensees. There is one and only one big reason why this should be true, namely, that the jobber makes no effort to sell or that he does not know how to sell

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sold if the jobber is willing to put forth an effort. Our field men have the advantage of knowing from observation the methods which are most productive of increased Ethyl sales and they should avail themselves of the opportunity to spread the gospel of merchandising to our jobber licensees. Most jobber stations are poorly operated and little effort is put forth to sell any product. Merchandise is bought rather than sold for the most part due to poor direction on the part of the jobber himself. The jobber has neither the intelligence nor the experience to put forth the merchandising ideas introduced by the sales managers of our large refining companies. These ideas are certainly not made known to him by the refining company with which he competes and he is slow to pick up the proper methods of salesmanship from observation of his competitors activities. Our field representatives can and should carry to him their knowledge of the procedure necessary for selling those products which bring the greatest return to him as well as his supplier.

If we are correct in estimating that something around twenty percent of our total Ethyl Gasoline sales is sold by jobbers then we must give a lot of consideration to the efforts which we make to get a jobber behind the sale of Ethyl Gasoline. Remember that in most cases the jobber is his own boss and does not have to have the authority of a board of directors before he institutes a policy favorable to the sale of Ethyl Gasoline. While it is true that the effect of getting one jobber enthused over the sale of Ethyl Gasoline will have practically no effect on our total sales figure we must remember that our two largest refining licensees do not sell a total of twenty percent of our product so that as a group our jobber business is more valuable to us in dollars and cents than the business received from our two largest refining licensees. The field representative, the division manager and the New York Office must realize the importance of our jobber business and we must guard against the tendency of treating our jobber activity as a routine procedure which is necessary but not particularly remunerative to us.

Each jobber who holds an Ethyl license is probably quite proud of this fact. On the other hand we have few jobbers who have any particular kind regards for the Ethyl Gasoline Corporation. Whether this is due to the fact that licenses have been refused to certain jobbers or whether it is due to the activity of our field representatives has never been entirely clear to us. We do feel, however, that many of our field representatives have not taken the proper attitude in dealing with our jobber licensees. We want our men to become friendly with and as far as possible to know our jobber licensees. We must first instill confidence in the jobber and persuade him that we are trying to serve him before we will get far in turning his activity toward the sale of our product. We will again revert to the example of the state of West Virginia where the Ethyl Gasoline Corporation representative is acquainted with not only every jobber but most every jobber employee. He knows most every filling station operator and tank wagon driver and it is most interesting to note the fact that the state of West Virginia has long been a leader in Ethyl Gasoline sales. Let every field repres[illegible]

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office city and let him ask the jobber to stop in and exchange views with us in this office at any time he is in New York. Let us remember that during 1933 we will need the friendship and cooperation of our jobber licensees more than we have ever needed it in the past and let us also remember that within our jobber ranks lies an opportunity for us to increase our Ethyl sales which we have hitherto failed to recognize.

Registered Aug. 5, 1924. **Trade-Mark 187,410**

UNITED STATES PATENT OFFICE.

GENERAL MOTORS CHEMICAL COMPANY, OF MORAINE CITY, NEAR DAYTON, OHIO.

ACT OF FEBRUARY 20, 1905.

Application filed September 24, 1923. Serial No. 186,125.

ETHYL

STATEMENT.

To all whom it may concern:

Be it known that General Motors Chemical Company, a corporation duly organized under the laws of the State of Delaware, and located in Moraine City, near the city of Dayton, county of Montgomery, State of Ohio, and doing business at Moraine City, near the said city of Dayton, has adopted and used the trade-mark shown in the accompanying drawing, for a MOTOR-FUEL COMPONENT, in Class 6, Chemicals, medicines, and pharmaceutical preparations.

The trade-mark has been used continuously in the business of said corporation and of its predecessor General Motors Research Corporation, since April, 1923.

The trade-mark is applied to the goods by means of a label upon which the trade-mark is displayed, and by stenciling the mark on a container in which the goods are shipped.

GENERAL MOTORS CHEMICAL COMPANY,
By FRANK O. CLEMENTS,
Assistant Secretary.

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[fol. 158] EXHIBIT 25-B

Registered Aug. 18, 1925. **Trade-Mark 202,275**

UNITED STATES PATENT OFFICE.

ETHYL GASOLINE CORPORATION, OF MORAINE CITY, DAYTON, OHIO.

ACT OF FEBRUARY 20, 1905.

Application filed April 1, 1925. Serial No. 211,994.

ETHYL

STATEMENT.

To the Commissioner of Patents:

Be it known that Ethyl Gasoline Corporation, a corporation duly organized under the laws of the State of Delaware, located in Moraine City, Dayton, county of Montgomery, State of Ohio, and doing business at Moraine City, Dayton, Ohio, has adopted and used the trade-mark shown in the accompanying drawing, for ANTIKNOCK COMPOUNDS FOR MOTOR FUEL, in Class 6, Chemicals, medicines, and pharmaceutical preparations, and presents herewith five specimens showing the trade mark as actually used by applicant upon the goods, and requests that the same be registered in the United States Patent Office in accordance with the act of February 20, 1905, as amended.

The trade mark has been used continuously in the business of said corporation, in the particular form shown, and applied to the goods in the particular manner indicated, since February 27, 1925.

Applicant is the owner of trade mark registration No. 187,410, August 5, 1924.

The trade mark is applied to the goods by means of labels affixed to the containers for such goods, or in any other suitable manner.

Applicant hereby appoints Browne & Phelps, Second National Bank Building, Washington, D. C., a firm composed of Francis L. Browne and Dudley Browne, its attorneys, to prosecute this application for registration, with full power of substitution and revocation, to make alterations and amendments therein, to receive the certificate, and to transact all business in the Patent Office connected therewith.

[L. S.] ETHYL GASOLINE CORPORATION,
By A. M. MAXWELL,
V. P

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EXHIBIT 25-C

Registered July 13, 1926. **Trade-Mark 215,282**

UNITED STATES PATENT OFFICE.

ETHYL GASOLINE CORPORATION, OF MORAINE CITY, DAYTON, OHIO.

ACT OF FEBRUARY 20, 1905.

Application filed April 1, 1925. Serial No. 211,995.

STATEMENT.

To all whom it may concern:

Be it known that Ethyl Gasoline Corporation, a corporation duly organized under the laws of the State of Delaware, located in Moraine City, Dayton, county of Montgomery, State of Ohio, and doing business at Moraine City, Dayton, Ohio, has adopted and used the trade-mark shown in the accompanying drawing, for ANTIKNOCK COMPOUND, in Class 6, Chemicals, medicines, and pharmaceutical preparations, and presents herewith five specimens showing the trade-mark as actually used by applicant upon the goods and requests that the same be registered in the United States Patent Office in accordance with the act of Febru-

No claim is made to the following words appearing upon the drawing: "Brand of Anti-knock Compound, New York, U. S A.," applicant however reserving its common law rights in the mark as a whole.

The trade mark is applied to the goods by means of labels affixed to the containers for such goods, or in any other suitable manner.

Applicant hereby appoints Browne & Phelps, Second National Bank Building, Washington, D. C., a firm composed of Francis L. Browne and Dudley Browne, its attorneys, to prosecute this application for registration, with full power of substitution and revocation, to make alterations and

ETHYL GASOLINE CORPORATION, OF MORAINE CITY, DAYTON, OHIO.

ACT OF FEBRUARY 20, 1905.

Application filed April 1, 1925. Serial No. 211,995.

STATEMENT.

To all whom it may concern:

Be it known that Ethyl Gasoline Corporation, a corporation duly organized under the laws of the State of Delaware, located in Moraine City, Dayton, county of Montgomery, State of Ohio, and doing business at Moraine City, Dayton, Ohio, has adopted and used the trade-mark shown in the accompanying drawing, for ANTIKNOCK COMPOUND, in Class 6, Chemicals, medicines, and pharmaceutical preparations, and presents herewith five specimens showing the trade-mark as actually used by applicant upon the goods and requests that the same be registered in the United States Patent Office in accordance with the act of February 20, 1905, as amended.

The trade mark has been used continuously in the business of said corporation, in the particular form shown, and applied to the goods in the particular manner indicated since February 27, 1925.

Applicant is the owner of trade mark registration No. 187,410, August 5, 1924.

No claim is made to the following words appearing upon the drawing: "Brand of Anti-knock Compound, New York, U. S A.," applicant however reserving its common law rights in the mark as a whole.

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[L. S.] ETHYL GASOLINE CORPORATION,
By A. M. MAXWELL,
V. P.

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[fol. 160] EXHIBIT 25-D

Registered Mar. 8, 1932 **Trade-Mark 292,242**

UNITED STATES PATENT OFFICE

ETHYL GASOLINE CORPORATION, OF NEW YORK, N. Y.

ACT OF FEBRUARY 20, 1905

Application filed November 11, 1931. Serial No. 321,014.

Q

Brand of Anti-Knock Compound

STATEMENT

To the Commissioner of Patents:

Ethyl Gasoline Corporation, a corporation duly organized under the laws of the State of Delaware, having a business office in the Chrysler Building, in the city of New York and State of New York, has adopted and used the trade-mark shown in the accompanying drawing, for ANTI-KNOCK FLUID, in Class 6, Chemicals, medicines, and pharmaceutical preparations, and presents herewith five specimens (or facsimiles) showing the trade-mark as actually used by applicant upon the goods, and requests that the same be registered in the United States Patent Office in accordance with the act of February 20, 1905, as amended. The trade-mark has been continuously used and applied to said goods in applicant's business since November 9, 1931.

No claim is made to the following words appearing upon the drawing: "Brand of Anti-Knock Compound", applicant however, reserving its common-law rights in the mark as a whole.

The trade-mark is applied to the goods by affixing to the containers a label on which the trade-mark appears, or by printing or otherwise impressing the trade-mark upon the containers in which the goods are shipped or in any other suitable manner.

The undersigned hereby appoints Browne & Phelps, a firm composed of Francis L. Browne, Dudley Browne, Nelson J. Jewett and Thomas L. Mead, Jr., whose postal address is Shoreham Building, Washington, D. C., its attorneys, to prosecute this application for registration, with full powers of substitution and revocation, to make alterations and amendments therein, to receive the certificate, and to transact all business in the Patent Office connected therewith.

[L. S.] ETHYL GASOLINE CORPORATION,
By E. W. WEBB,
President.

UNITED STATES PATENT OFFICE

ETHYL GASOLINE CORPORATION, OF NEW YORK, N. Y.

ACT OF FEBRUARY 20, 1905

Application filed November 11, 1931. Serial No. 321,014.

STATEMENT

To the Commissioner of Patents:

Ethyl Gasoline Corporation, a corporation duly organized under the laws of the State of Delaware, having a business office in the Chrysler Building, in the city of New York and State of New York, has adopted and used the trade-mark shown in the accompanying drawing, for ANTI-KNOCK FLUID, in Class 6, Chemicals, medicines, and pharmaceutical preparations, and presents herewith five specimens (or facsmiles) showing the trade-mark as actually used by applicant upon the goods, and requests that the same be registered in the United States Patent Office in accordance with the act of February 20, 1905, as amended. The trade-mark has been continuously used and applied to said goods in applicant's business since November 9, 1931.

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[L. S.] ETHYL GASOLINE CORPORATION,
By E. W. WEBB,
President.

(1911)

I, JOSEPH F. S. FITZPATRICK, Secretary of State of the State of New Jersey,

Do Hereby Certify, That Ethyl Gasoline Corporation

did, on the thirty-first day of March A. D. nineteen hundred and twenty-eight, in accordance with an Act entitled "An act to protect and secure the rights, property and interests therein of the persons, associations, organizations and corporations adopting and filing the same," approved March fifteenth, one thousand eight hundred and ninety-eight, file and register in my office duplicate copies of a Label or Trade-Mark adopted by the said Ethyl Gasoline Corporation of which the annexed is a true copy.

ETHYL

In Testimony Whereof, I have hereunto set my hand and affixed my Official Seal, at Trenton, this seventeenth day of April A. D. 1928

Joseph F. S. Fitzpatrick
Secretary of State.

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State of New Jersey

I, JOSEPH F. S. FITZPATRICK, *Secretary of State of the State of New Jersey,*

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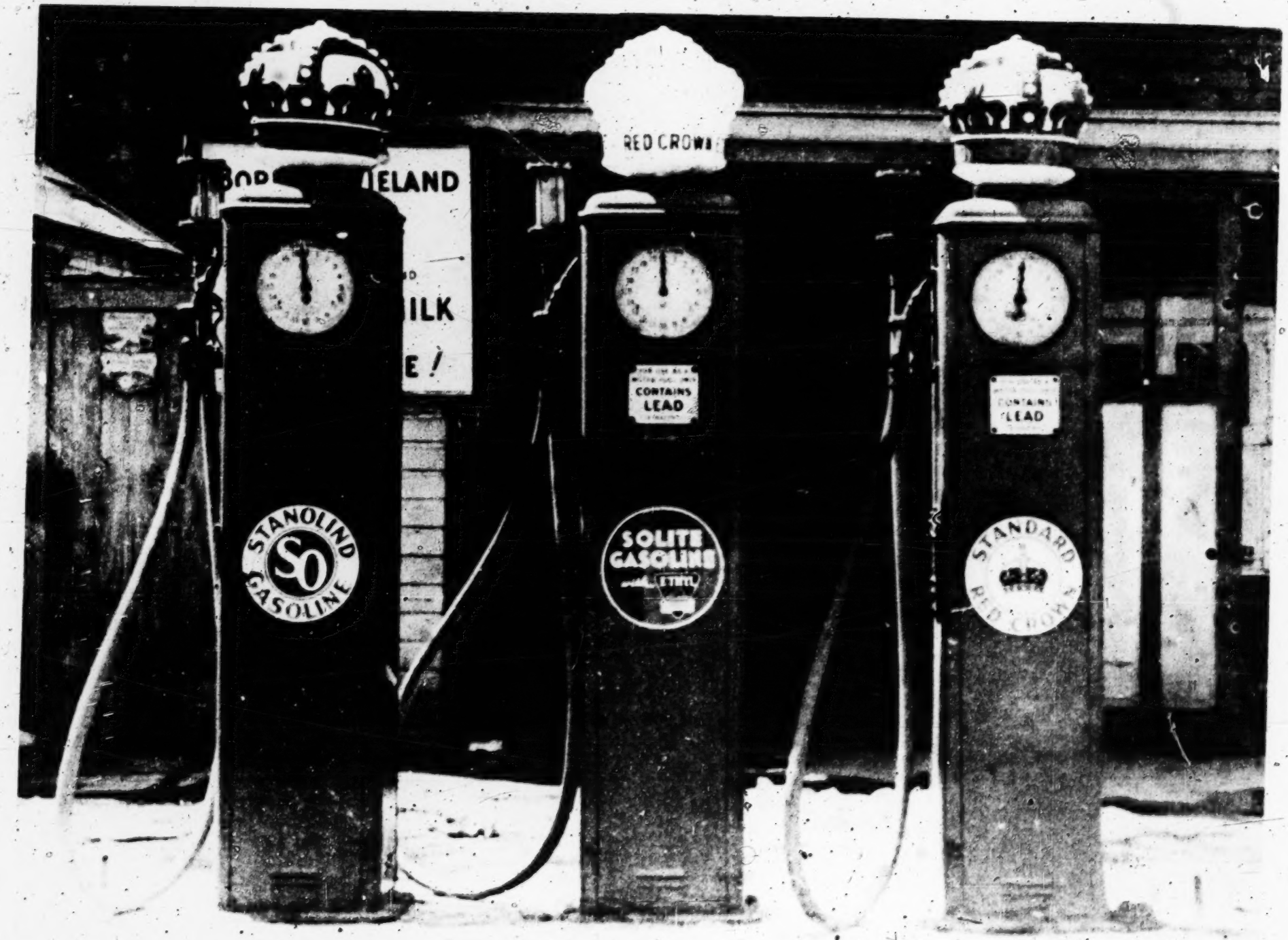
Joseph F. S. Fitzpatrick
Secretary of State.

162-166


RED CROWN
CONTAINS LEAD
STANOLIND GASOLINE
SO
SOLITE GASOLINE
STANDARD
CONTAINS LEAD

ESSO
Essolene
Essolene
LEAD
LEAD
LEAD

EXHIBIT 25-I(7)

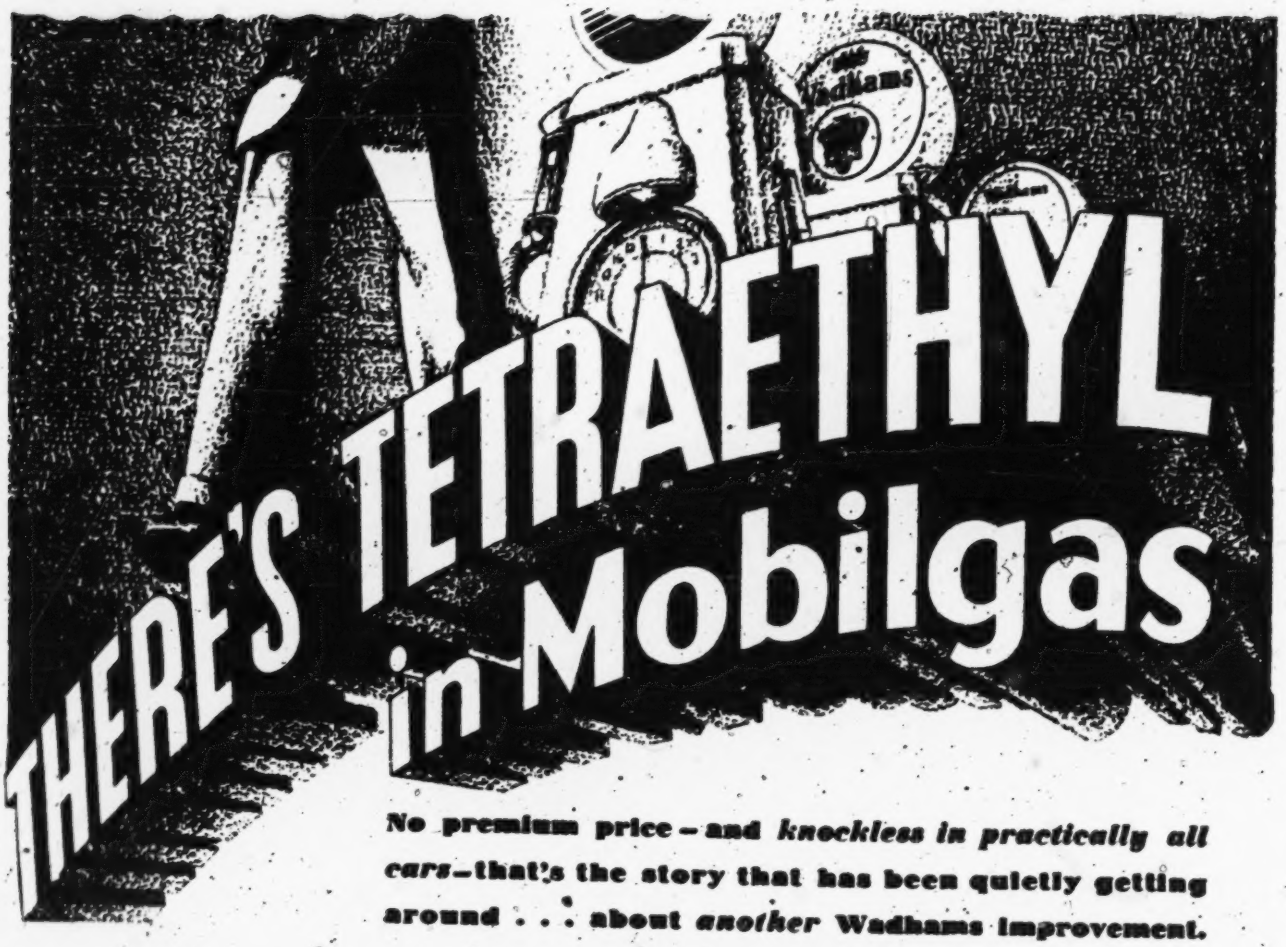
170-173

No premium price – and *knockless in practically all cars*–that's the story that has been quietly getting around . . . about *another* Wadhams improvement.

Now *everybody* knows it . . . there's Tetraethyl Lead in Mobilgas! . . . . On Mobilgas pumps everywhere, you see the white badge of certified Tetraethyl content – the famed ingredient that kills knocks and increases power.

Enjoy knockless power *with* the outstanding speed and mileage economy of Wisconsin's favorite gasoline.

Milwaukee
Central - WSC
29 ch.



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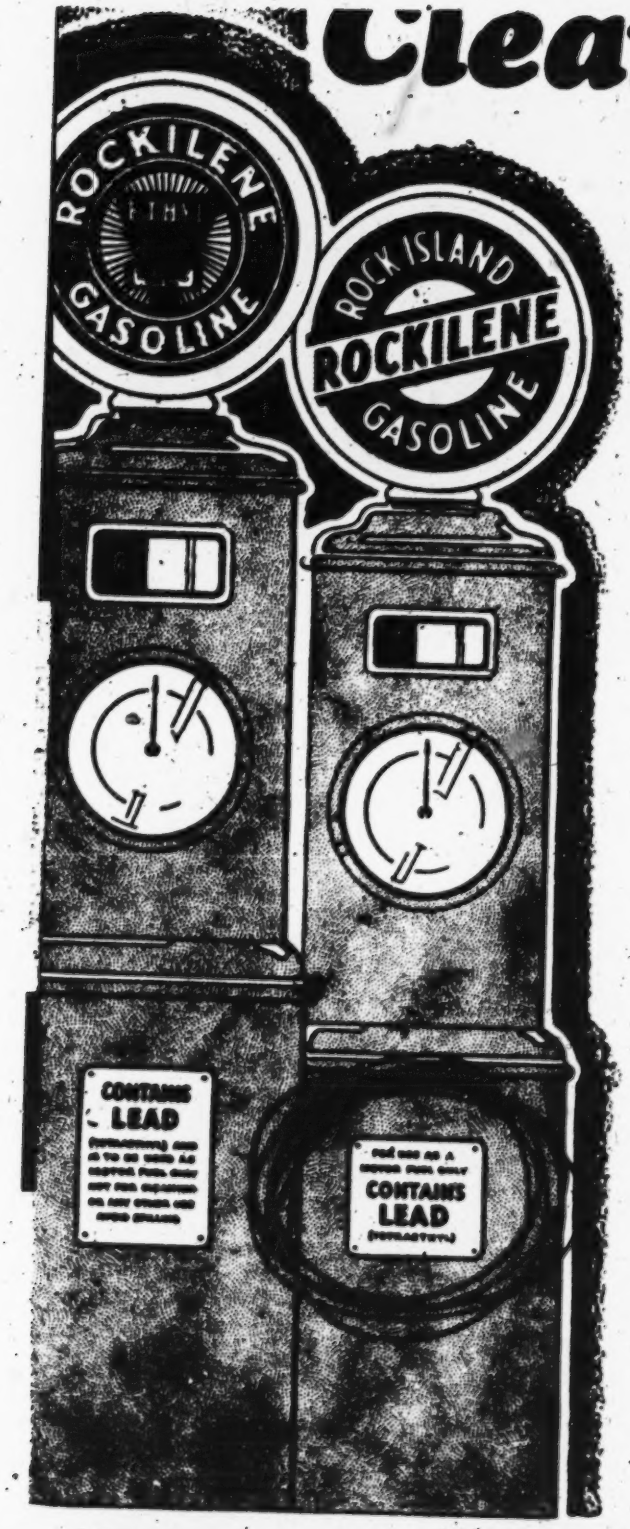
Enjoy knockless power *with* the outstanding speed and mileage economy of Wisconsin's favorite gasoline. Change to "Mobilgas with Tetraethyl". Try a fill today.

Wadhams

A SOCONY-VACUUM COMPANY

Milwaukee
Central – WJC
79 ch.

1938



Clear the Way for 2 new Gasolines!

When the first tank cars of Rockilene Ethyl and Rockilene Golden left the refinery at Duncan on February 10th, a new field of opportunity was opened for the hundreds of independent jobbers who have been our customers.

Our prime purpose is to be in a position to supply our jobbers with leaded gasoline...refined the Rock Island way.

Rockilene Ethyl

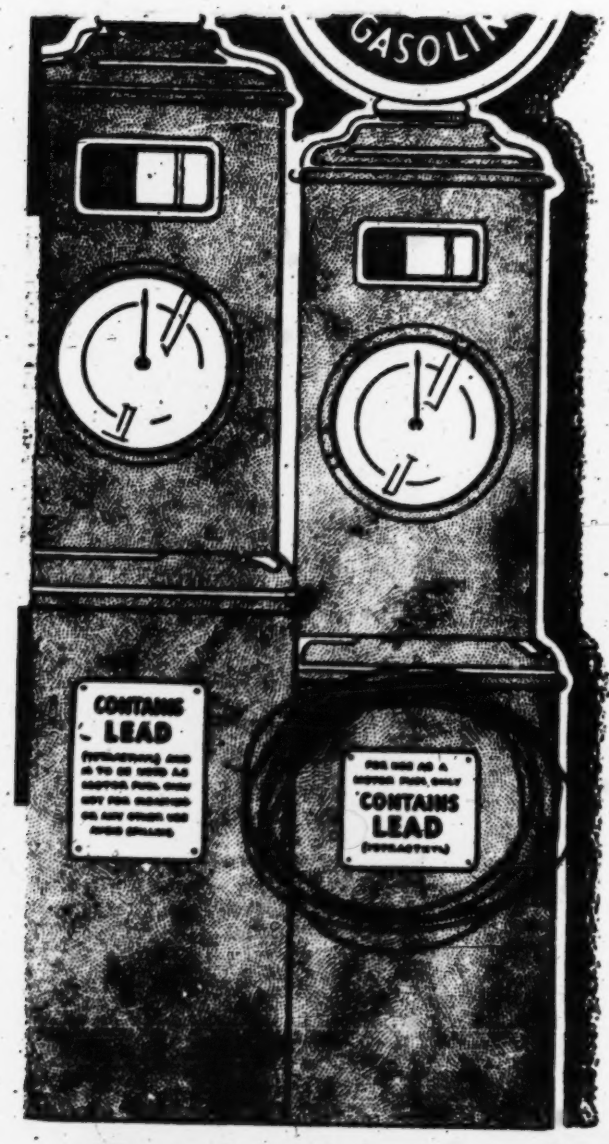
The priceless Ethyl trade-mark now identifies this new Rock Island product. We urge all of our customers who are not yet licensed to sell leaded gasolines to write us immediately.

Rockilene Golden

This new 70 octane gasoline, readily identified by its Golden color...priced to sell in the "regular" price bracket. Special requirements are necessary in handling this gasoline also.

Do not overlook the many attractive features contained in our new 1934 contract. Full information on request.

ROCK ISLAND REFINING COMPANY



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Our prime purpose is to be in a position to supply our jobbers with leaded gasoline . . . refined the Rock Island way.

Rockilene Ethyl

The priceless Ethyl trade-mark now identifies this new Rock Island product. We urge all of our customers who are not yet licensed to sell leaded gasolines to write us immediately.

Rockilene Golden

This new 70 octane gasoline, readily identified by its Golden color . . . priced to sell in the "regular" price bracket. Special requirements are necessary in handling this gasoline also.

Do not overlook the many attractive features contained in our new 1934 contract. Full information on request.

ROCK ISLAND REFINING COMPANY

DUNCAN, OKLAHOMA

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Ex. 25-C (4)

NOW!

INDIAN CHIEF BLUE GREEN

"Double Plus" Gasoline

NO EXTRA COST **WITH** NO EXTRA COST

Tetraethyl Lead and Carbon Removing Compound

No matter if your car is a 1924 or 1934 by using Indian Chief Blue Green "Double Plus" you'll like it better.

Tetraethyl Lead is the finest of all Anti-Knock Fluids. That is one reason why this superb gasoline will give you the performance in your car that you thought was the impossible.

Carbon Removing Compound is the finest carbon remover. It removes the carbon, keeps your valves clean and smooth and in a short time using it you will notice how smooth your car performs.

This "Double Plus" Gasoline cannot be equalled regardless of imitations. You'll like it better.

Drive in at any Independent Station where you see the Indian Chief sign, and fill your tank.

"Double Plus" Gasoline

NO EXTRA COST

WITH

NO EXTRA COST

Tetraethyl Lead and Carbon Removing Compound

No matter if your car is a 1924 or 1934 by using Indian Chief Blue Green "Double Plus" you'll like it better.

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This "Double Plus" Gasoline cannot be equalled regardless of imitations. You'll like it better.

Drive in at any Independent Station where you see the Indian Chief sign, and fill your tank. "You'll like it better."

Hitchcock Oil Co.

"Boise Owned and Operated"

1741-184 3/1/34

NO EXTRA COST FOR

Tetra ethyl

76

Gasoline

THE HIGHER ANTI--KNOCK LEADER

SF Chron. - 3/30
Seattle Star - 3/29
Oregon Daily Jour. - 3/20
[illegible] - 3/20
[illegible]

Seattle Post-Intelligencer
Mar 20, 1934

With a higher number of NATURAL Anti-knock Fractions plus TETRAETHYL, the New 76 maintains leadership as the West's outanding Quality Gasoline selling at regular gas prices.

INCE Jan. 1, 1932, Union 76 Gasoline has been the generally acknowledged Higher Antiock Leader.

Today Union further cements that leadership giving you 76 plus TETRAETHYL—the antiock ingredient formerly found only in ETHYL solines.

This in addition to the higher PENTANE ntent *(natural higher anti-knock fractions)* for hich 76 is noted.

5 OTHER PREMIUM QUALITIES

And the 5 other premium qualities of 76 are fully retained in this new fuel—

1. **Unexcelled mileage with more reserve power**
2. **NO vapor-lock on warm days**
3. **Greater acceleration**
4. **Faster cold morning warm-up**
5. **Reduced crankcase dilution**

Let the first 76 banner you see remind you to try a tankful of this **advanced** 76. All we ask is that you compare it with any other regular priced gasoline.

UNION OIL COMPANY
A PACIFIC COAST INSTITUTION
OWNED BY OVER 17,000 AMERICANS

Try New TETRAETHYLIZED 76 — The Higher Anti-Knock Leader is the OUTSTANDING quality gasoline sold at regular gasoline prices.

The LEADER 76 GASOLINE

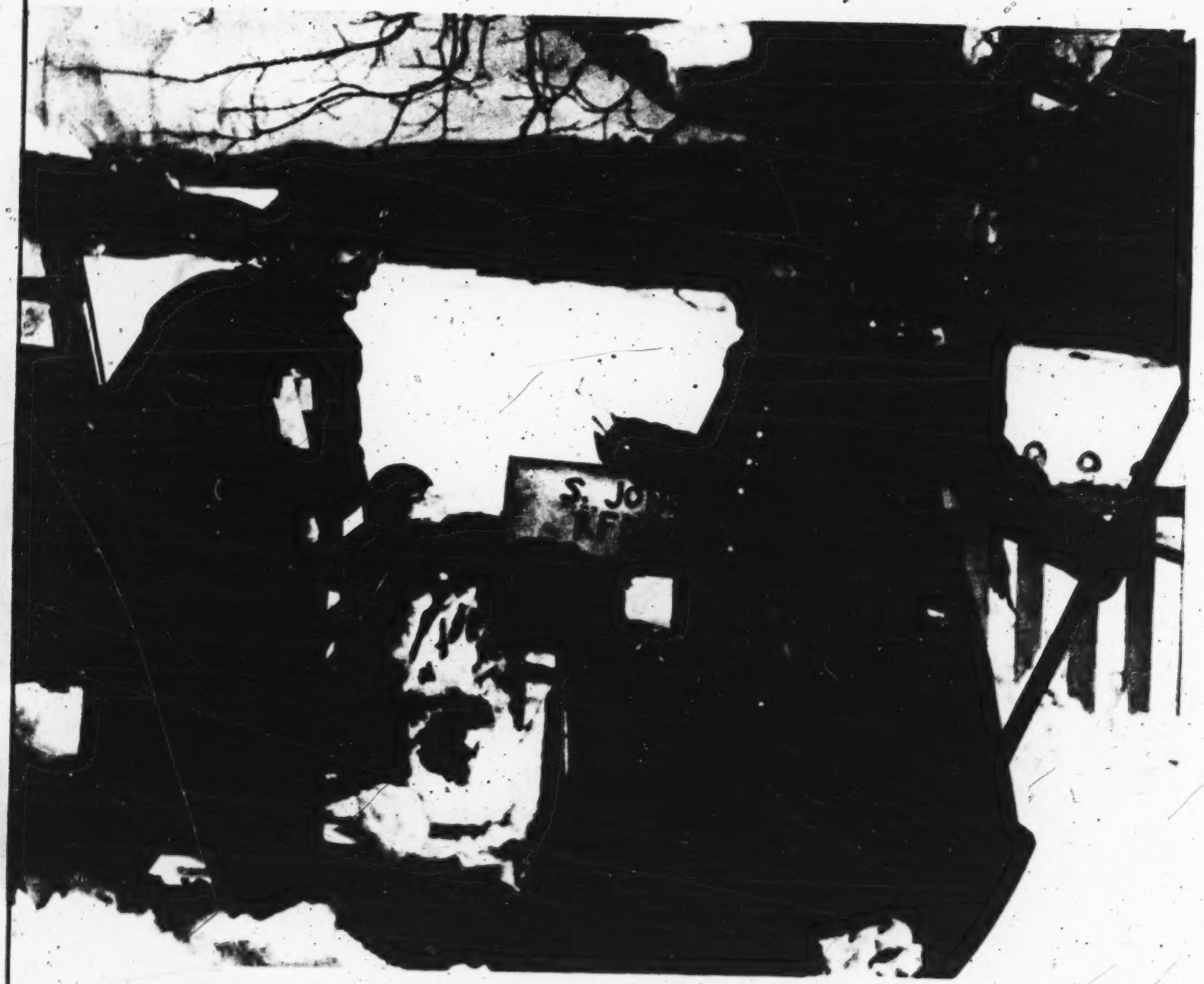
NRA

At all UNION SERVICE STATIONS, INC. and thousands of INDEPENDENT DEALERS

WATCH FOR THIS SIGN ON THE 76 PUMP

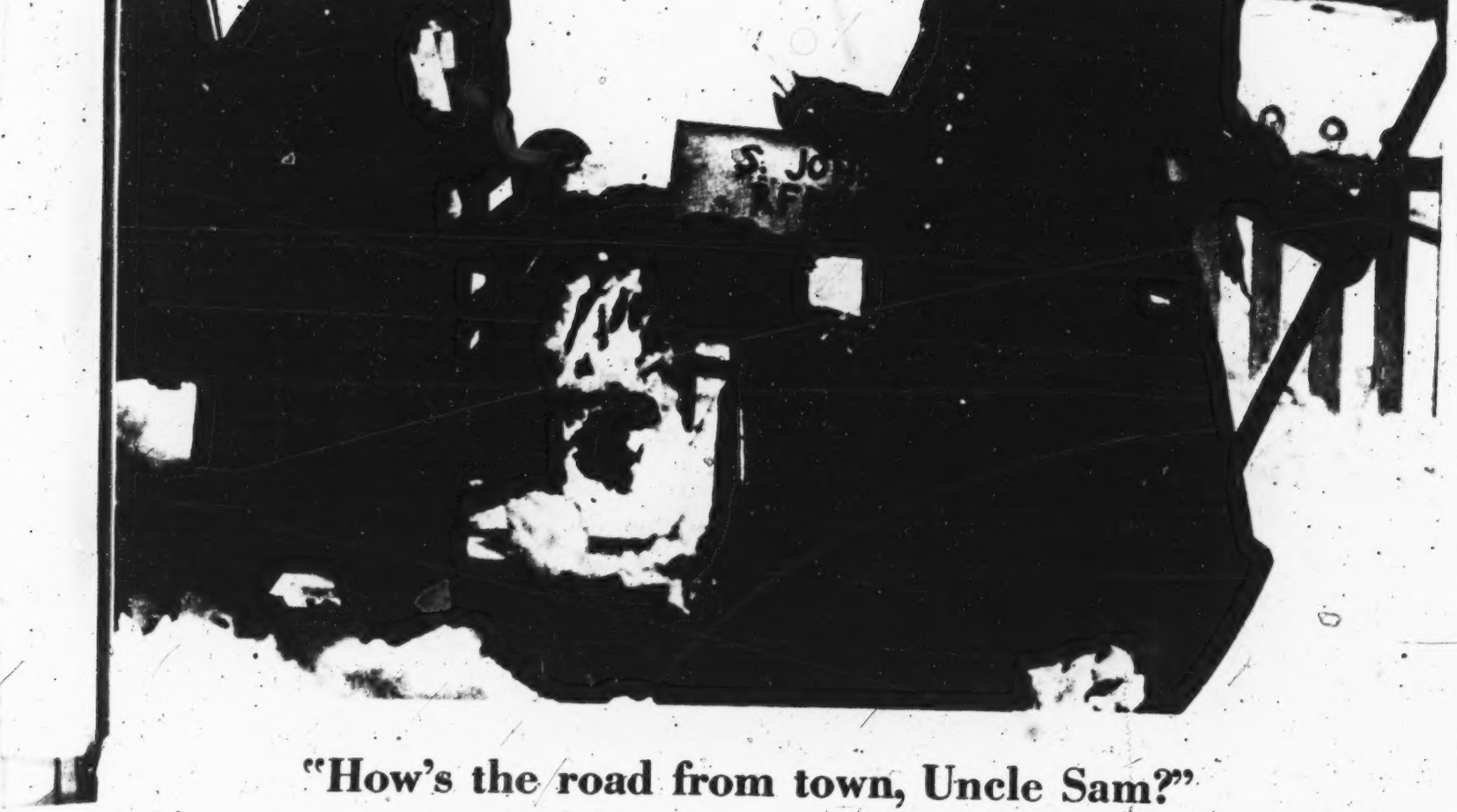
FOR USE AS A MOTOR FUEL ONLY
CONTAINS LEAD (TETRAETHYL)

185-191



"How's the road from town, Uncle Sam?"
"Not so bad—if you've got good winter gas". . .

UNCLE Samuel Simpkins has been delivering mail



"How's the road from town, Uncle Sam?" "Not so bad—if you've got good winter gas". . .

UNCLE Samuel Simpkins has been delivering mail and good advice to the neighbors along his route for nigh on to forty years. So . . .

"What do you mean by 'good winter gas,' Sam?" asks Silas Jones. "Quick-startin'?"

"Yes, but that's only half the story, Si," says Sam. "You've got to get to town *after* your car's started! It takes a heap of *power* to push through snow and slush. Power depends on compression—and the better your gas compresses, the more power you get. That's why I use Ethyl."

EVERY CAR OWNER SHOULD HAVE THESE FACTS:

To increase the compressibility of motor fuel, oil companies use anti-knock fluids manufactured by the Ethyl Gasoline Corporation. They are so effective that most regular and premium gasolines sold in the United States and Canada now contain them.

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1. You get a sufficient amount of fluid (containing tetraethyl lead) to produce the highest anti-knock rating by the official test methods of the oil and automotive industries.

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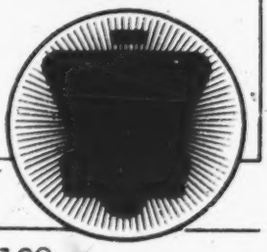
3. With Ethyl you get the *full* performance of the high compression engines of modern automobiles. Ethyl also livens older cars which have carbon deposits.

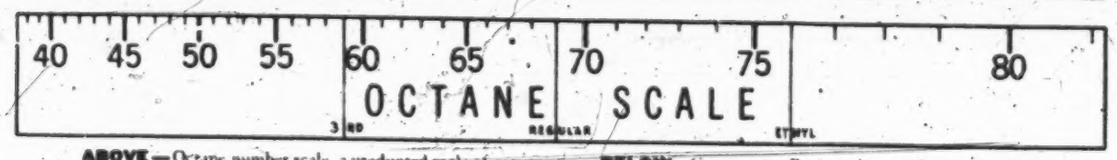


To get ALL the power and pleasure from your car investment— **NEXT TIME GET ETHYL!**

203

Measure the possible compression...

OF YOUR 1935 CAR BY THE OCTANE SCALE



ABOVE—Octane number scale, a graduated scale of gasoline antiknock value—the units of which become increasingly larger—and more valuable—in the higher numbers.

BELOW—Compression Ratio scale, a uniform scale which may be oriented to octane scale for any given engine by determining any two corresponding points.

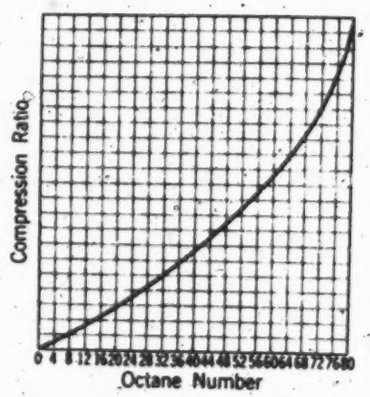
It's not like most scales the divisions become increasingly larger toward the higher end

A FEW YEARS AGO, when all grades of gasoline were in a lower magnitude of octane rating, the variation in the antiknock value of single units of octane number was not of great importance. Today, with all grades of gasoline quality improved—one octane number in any gasoline is much more important than it used to be, and one octane number in today's best gasoline allows more than twice the increase in compression ratio that is allowed by one octane number in the lowest grade.

This is illustrated on the curve at the right and by the two scales at the bottom of the opposite page. The spread between 59 octane and 60 octane gasoline is less than half the spread between 75 and 76 octane.

Compression Ratio Varies by Engine Design

Figures for compression ratios are not given on the compression scale



octane numbers are more valuable than the lower in any engine. All that is necessary to orient these two scales for your engine is to determine the permissible compression ratio for any two octane numbers.

The high reward of high octane is evident. We have drawn a line across the octane scale at the point of 76—the minimum standard of Ethyl Gasoline quality. Another line at the point of 69 indicates the present average quality of leaded regular-priced gasoline (non-leaded regular-priced gasolines are from one to four octane numbers lower gasoline is today about 59—though the variations in octane number among such grades of fuel is extreme.

Measure of Ethyl Value

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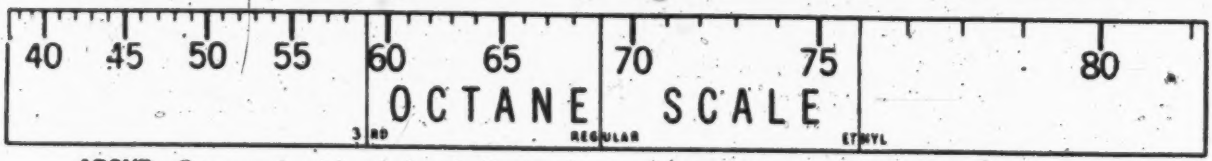

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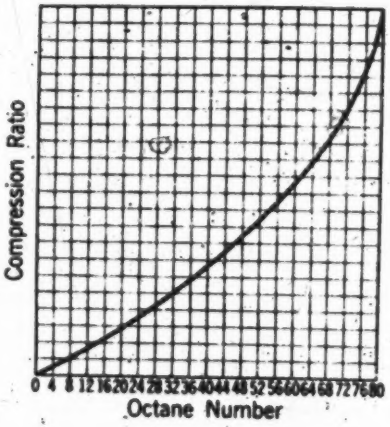

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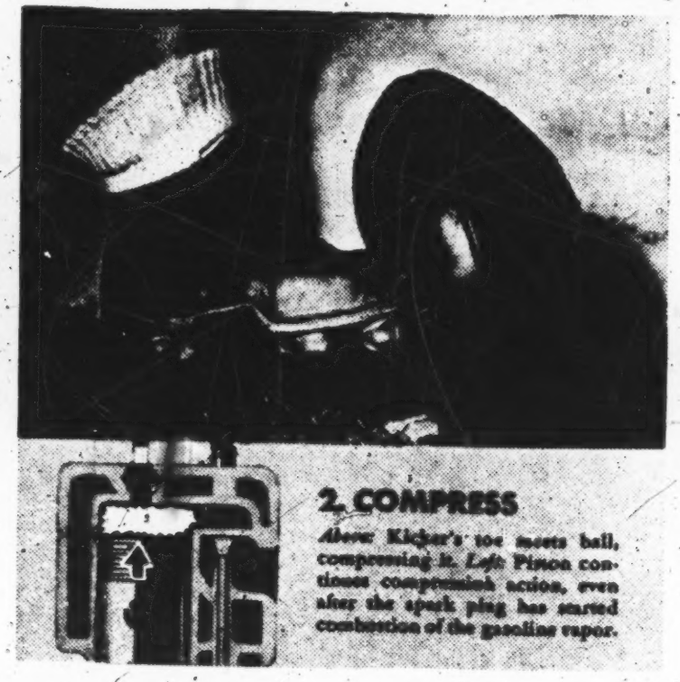
CAMERA CLICKS KICK-OFF IN 1/100,000th OF A SECOND

Pictures below show how Compression means Power in your car's engine, too....

1. READY

Above: Foot swings to compress ball. *Left:* Drawing shows piston in automobile engine cylinder starting upward to compress gasoline vapor in combustion chamber.



2. COMPRESS

Above: Kicker's toe meets ball, compressing it. *Left:* Piston continues compression action, even after the spark plug has started combustion of the gasoline vapor.

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Exhibit 25-H(3)

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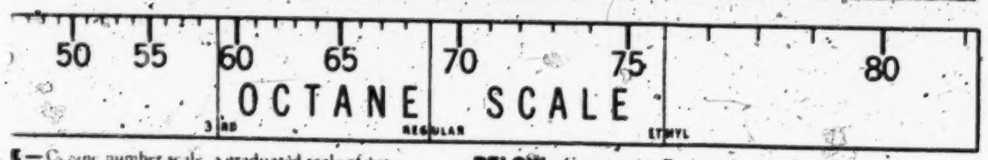

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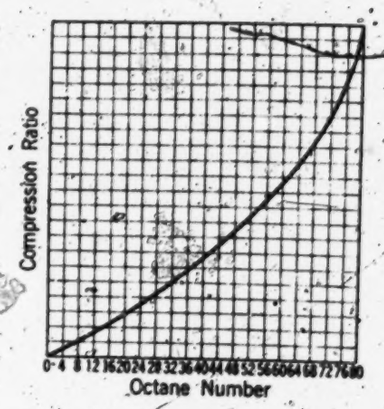

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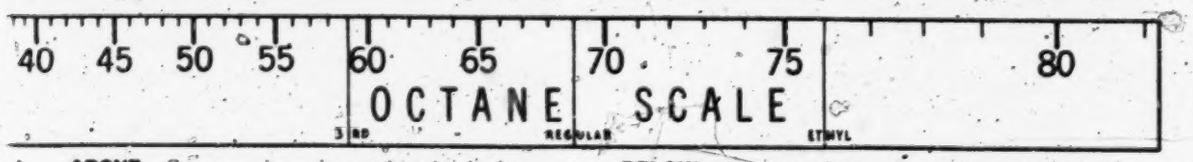

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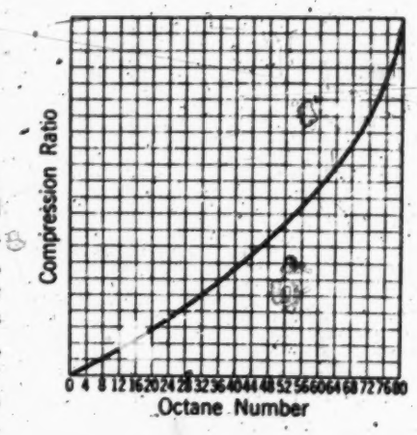

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Advertisement prepared by
Batten, Barton, Durstine & Osborn, Inc.
2 pages—7 x 10
P. O. 4-5371 6-9-20-34

192a-193

EXHIBIT 25-H(8)

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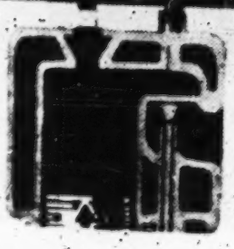

1. READY

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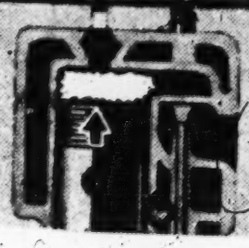

2. COMPRESS

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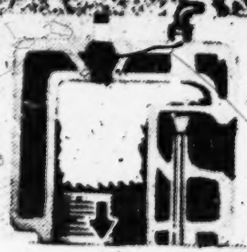

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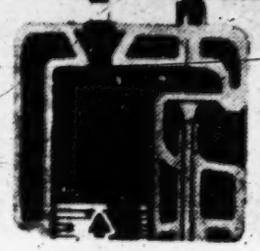

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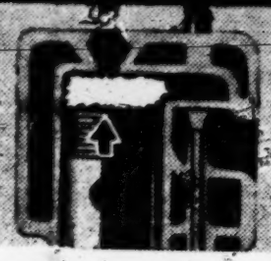

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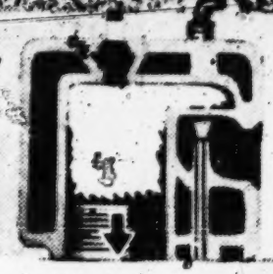

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Rotogravure & B & W Newspapers—November

Advertisement prepared by
Batten, Barton, Durstine & Osborn, Inc.
Size: 2 x 143 lines
Date: 5-4513 Date: 9-24-35

[fol. 195] IN SUPREME COURT OF THE UNITED STATES

STATEMENT OF POINTS TO BE RELIED UPON—Filed Jan. 2, 1940

Ethyl Gasoline Corporation, Earle W. Webb and John Coard Taylor, Appellants in the above-entitled cause, hereby adopt as their statement of points upon which they intend to rely, as required by Paragraph 9 of Rule 13 of the Rules of this Court, their Assignment of Errors filed with the Clerk of the District Court for the Southern District of New York and included by him in the transcript of the record transmitted to this Court.

Dean Acheson, H. Thomas Austern, 701 Union Trust Bldg., Washington, D. C., Attorneys for Appellants.

Service of the above statement of points to be relied upon by Appellants is hereby acknowledged by Appellee this 2nd day of January, 1940.

Grant W. Kelleher, Attorney for Appellee.

[fol. 195½] [File endorsement omitted.]

[fol. 196] IN SUPREME COURT OF THE UNITED STATES

STIPULATION OF PORTIONS OF RECORD TO BE PRINTED—Filed Dec. 18, 1939

The parties to this cause, through their respective attorneys, hereby stipulate and agree that the entire record on appeal shall be printed as filed in this Court with the exception of the Exhibits to the Petition (being Exhibits A, B, C, D, and E thereto) and the following Exhibits to the Stipulation of April 22, 1938 (designated as Item 3 of the Stipulation as to the record on appeal), which Exhibits are to be omitted in printing the record:

Exhibit 6-A, p. 11 (Photograph of mixing plant).
Exhibit 6-B, p. 12 (Blueprint of mixing plant).
Exhibit 23-A, pp. 116-121 (Petroleum Code—Feb. 11, 1929).
Exhibit 23-B, pp. 122-127 (Modified Code—Aug. 10, 1931).
Exhibit 23-C, pp. 128-154 (N. R. A. Code for Petroleum Industry).

Exhibit 23-D, pp. 155-156 (F. T. C. Order—Sept. 5, 1937).
[fol. 197] Exhibit 25-I (1), p. 163 (Photograph of Filling Station).
Exhibit 25-I (2), p. 164 (Photograph of Filling Station).
Exhibit 25-I (3), p. 165 (Photograph of Filling Station).
Exhibit 25-I (4), p. 166 (Photograph of Filling Station).
Exhibit 25-G (1), p. 171 (Advertisements of Licensees).
Exhibit 25-G (2), p. 172 (Advertisements of Licensees).
Exhibit 25-G (3), p. 173 (Advertisements of Licensees).
Exhibit 25-G (5), p. 175 (Advertisements of Licensees).
Exhibit 25-G (6), p. 176 (Advertisements of Licensees).
Exhibit 25-G (7), p. 177 (Advertisements of Licensees).
Exhibit 25-G (8), p. 178 (Advertisements of Licensees).
Exhibit 25-G (9), p. 179 (Advertisements of Licensees).
Exhibit 25-G (10), p. 180 (Advertisements of Licensees).
Exhibit 25-G (11), p. 181 (Advertisements of Licensees).
Exhibit 25-G (12), p. 182 (Advertisements of Licensees).
Exhibit 25-G (13), p. 183 (Advertisements of Licensees).
Exhibit 25-G (14), p. 184 (Advertisements of Licensees).
Exhibit 25-G (16), p. 186 (Advertisements of Licensees).
Exhibit 25-G (17), p. 187 (Advertisements of Licensees).
Exhibit 25-G (18), p. 188 (Advertisements of Licensees).
Exhibit 25-G (19), p. 189 (Advertisements of Licensees).
Exhibit 25-H (1), p. 190 (Advertisements of Ethyl Gasoline Corporation).
Exhibit 25-H (2), p. 191 (Advertisements of Ethyl Gasoline Corporation).
Exhibit 25-H (4), p. 193 (Advertisements of Ethyl Gasoline Corporation).

The following Exhibits to the Stipulation of April 22, 1938 (item 3 of the Stipulation as to the record on appeal) are to be included in printing the record on appeal:

Exhibit 3-A, pp. 1-4 (Patent No. 1,573,846).
[fol. 198] Exhibit 3-B, pp. 5-6 (Patent No. 1,592,954).
Exhibit 3-C, pp. 7-8 (Patent No. 1,668,022).
Exhibit 3-D, pp. 9-10 (Patent No. 1,787,419).
Exhibit 6-C, pp. 13-29 (Regulations for Handling and Mixing Ethyl Fluid).
Exhibit 9-A, pp. 30-36 (Refiner's License and Sales Agreement—Regular).
Exhibit 9-B, pp. 37-46 (Refiner's License and Sales Agreement—Ethyl).

Exhibit 9-C, pp. 47-51 (Refiner's License—non-manufacturing).

Exhibit 13-A, pp. 52-54 (Jobber License—Ethyl).

Exhibit 13-B, pp. 55-57 (Jobber License—Regular).

Exhibit 14-A, pp. 58-64 (Regulation Proposed by Surgeon General).

Exhibit 14-B, pp. 65-68 (Changes in Regulations Proposed).

Exhibit 14-C, p. 69 (Photostat of lead sign—first form).

Exhibit 14-D, p. 70 (Photostat of lead sign—second form).

Exhibit 17-A, p. 71 (Jobbers' Investigation Report Form—First).

Exhibit 17-B, p. 72 (Jobbers' Investigation Report Form—Second).

Exhibit 17-C, pp. 73-106 (Field Representative Manual).

Exhibit 17-D, pp. 107-115 (Supplemental Instructions).

Exhibit 25-A, p. 157 (Trade-Mark Registration No. 187,410).

Exhibit 25-B, p. 158 (Trade-Mark Registration No. 202,275).

Exhibit 25-C, p. 159 (Trade-Mark Registration No. 215,282).

Exhibit 25 D, p. 160 (Trade-Mark Registration No. 292,242).

Exhibit 25-E, p. 161 (New Jersey Trade-Mark Registration).

Exhibit 25-F, p. 162 (New Jersey Trade-Mark Registration).

[fol. 199] Exhibit 25-I (5), p. 167 (Photograph of Filling Station).

Exhibit 25-I (6), p. 168 (Photograph of Filling Station).

Exhibit 25-I (7), p. 169 (Photograph of Filling Station).

Exhibit 25-I (8), p. 170 (Photograph of Filling Station).

Exhibit 25-G (4), p. 174 (Advertisements of Licensees).

Exhibit 25-G (15), p. 185 (Advertisements of Licensees).

Exhibit 25-H (3), p. 192 (Advertisements of Ethyl Gasoline Corporation).

Exhibit 25-H (5), p. 194 (Advertisements of Ethyl Gasoline Corporation).

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Grant W. Kelleher.

December —, 1939.

[fol. 200] [File endorsement omitted.]

Endorsed on cover: File No. 43,943, S. New York, D. C. U. S., Term No. 536. Ethyl Gasoline Corporation, Earle W. Webb and John Conard Taylor, Appellants, vs. The United States of America. Filed November 16, 1939. Term No. 536, O. T., 1939.

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SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1939

No. 536

ETHYL GASOLINE CORPORATION, EARLE W. WEBB AND JOHN COARD TAYLOR,

Appellants,

vs.

THE UNITED STATES OF AMERICA.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

STATEMENT AS TO JURISDICTION.

DEAN ACHESON,
H. THOMAS AUSTERN,
Counsel for Appellants.

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SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1939

No. 536

ETHYL GASOLINE CORPORATION, EARLE W. WEBB AND JOHN COARD TAYLOR,

Appellants,

vs.

THE UNITED STATES OF AMERICA,

Appellee.

STATEMENT AS TO JURISDICTION.

1. This is an appeal from a final decree of the District Court of the United States for the Southern District of New York, entered in a suit in equity brought by the United States under Section 4 of the Sherman Anti-Trust Act of July 2, 1890, as amended (26 Stat. 209, 15 U. S. C. Sec. 4); enjoining appellants from executing or continuing certain agreements thought by the Court to be in restraint of trade in violation of Section 1 of that Act, 26 Stat. 209, 15 U. S. C. Sec. 1.

2. The statutory Jurisdiction of this Court to review the decree of the District Court upon direct appeal is conferred by Section 2 of the Expediting Act of February 11, 1903, as amended (32 Stat. 823, 36 Stat. 1167, 15 U. S. C. Sec.

29) and Section 238 of the Judicial Code, as amended (36 Stat. 1157, 38 Stat. 804, 43 Stat. 938, 28 U. S. C. Sec. 345). Among the more recent decisions sustaining the jurisdiction of this Court under precisely similar circumstances are *Interstate Circuit, Inc.* v. *United States*, 306 U. S. 208; *Sugar Institute* v. *United States*, 297 U. S. 553; *Atlantic Cleaners & Dyers* v. *United States*, 286 U. S. 427.

3. The final decree of the District Court sought to be reviewed was entered on August 14, 1939. A petition for appeal to this Court was presented to District Judge Wm. Bondy on October 9, 1939, and was by him allowed the same day.

4. The petition in this case sought the cancellation of a series of individual patent licenses issued by the defendant corporation to jobbers engaged in selling its patented lead-treated gasoline and the cancellation of certain provisions in licenses issued to refiners, engaged in the manufacture of such patented fuel which restricted its sale to licensed jobbers. Defendant corporation is the owner of a series of patents embracing what is known as anti-knock fluid, the combination of such fluid and gasoline to form a fuel with particular anti-knock characteristics, and the method of utilizing such fuel in an internal combustion engine. The validity of these patents is not in question in these proceedings. In addition, the defendant corporation owns a number of trademarks on the patented fuel among which is the very familiar and exceedingly valuable "Ethyl" trademark.

The Government contended, in the language of the District Court (P. 6), "that the defendants have imposed unlawful restraints first, upon jobbers to whom licenses have been issued, by compelling them to participate in agreements or understandings to maintain resale prices, and second, upon jobbers to whom licenses have been denied, who

have been excluded from the market as a result of defendants' agreements with the refiner licensees."

The defendants denied the charges of price maintenance and contended that the jobber licenses were valid and essential to the lawful exploitation of their patents,—specifically, that because of early difficulties in the sale of gasoline treated with tetraethyl lead they had withdrawn from business until its sale had been approved by the Surgeon-General of the United States subject to specific regulations for the protection of the public health; and that the jobber license system was the only effective means for insuring compliance with such regulations; furthermore, that they had developed a substantial business in and owned valuable trademarks on the patented product, such trademarks denoting high test premium gasoline, and that it was commercially necessary to use jobber licenses to protect the patented product against dilution or adulteration and thereby insure continued good will for it. Defendants further contended that other means of ensuring these ends were ineffective.

The cause was tried upon a stipulation which, together with certain exhibits, set forth in detail the patents and trademarks, facts concerning the gasoline refining and selling industry, the various license agreements, the regulations of the Surgeon-General of the United States governing the handling and selling of the patented lead-treated gasoline, the problems of dilution and adulteration, the practices of the defendants in issuing and refusing jobber licenses, etc. The case was orally argued on June 16th and 17th, 1938. On May 19, 1939, the District Court entered its opinion, and on August 14 its findings and conclusions and a stay order pending determination on appeal.

The District Court refused to find for the Government upon its first contention that the jobber licenses which had been issued had been used for price maintenance. It found that no jobber license had been canceled because of price

cutting even though approximately 11,000 out of the 12,000 jobbers in the country had been licensed to sell the patented product and there had been a great deal of price cutting on the part of licensed jobbers.

The District Court, however, decided for the Government upon its second contention,—that the jobbers who had been denied licenses were excluded from dealing in the patented product in violation of the Sherman Act. It reached this conclusion because it found that in some instances jobbers had been denied licenses because of their price policies, and because it found that, although the interests which the defendant corporation sought to protect were proper and legitimate, there were other (unspecified) ways of protecting them. By its decree the District Court swept away any system of jobber licenses whatever.

In so doing, the District Court treated the case as though the defendant corporation owned merely a patent on the lead-fluid, one of the elements used in manufacturing the patented lead-treated fuel. It overlooked the fact that the defendant corporation by reason of its patents on the lead-treated fuel and on the use of this fuel had the right to select those through whom such patented fuel might be sold to the public. Its decree abrogates this right under any and all circumstances.

Even within its erroneous narrow view of the patents, the District Court acted on the basis of assumptions made without evidence. While acknowledging that the defendant corporation had legitimate and proper interests—*i. e.*, securing compliance with the Surgeon-General's public health regulations, the protection of its trade-marks, the prevention of deterioration, dilution, and adulteration—the court on its own speculations, without support in the evidence, denied any effective method for securing these ends. And, finally, its conclusion that the entire jobber licensing system should be wiped out because in violation of the anti-trust

laws, rests upon nothing more substantial than its finding that in some instances licenses had been denied because of the business or price policies of the applicant while at the same time it found that licenses had been granted to persons with the same business or price policies and did not find that refusal on this basis was the policy of the defendant which had licensed 11,000 out of 12,000 jobbers and had never revoked a license for any reason connected with pricing or marketing policies.

It decreed the cancellation of *all* jobber licenses and enjoined the *future* issuance of *any jobber licenses* for the handling of lead-treated gasoline. It likewise decreed the cancellation of provisions in the manufacturing licenses which restricted sales of the patented product to licensed jobbers.

5. The questions decided by the District Court are substantial and important and have not hitherto been settled by any decisions of this Court.

First: In ordering the cancellation of defendant corporation's jobber licenses as being in restraint of trade under Section 1 of the Sherman Act, and in enjoining for the same reason any future jobber licenses for the handling of lead-treated gasoline, the decree unjustifiably renders it impossible for defendant corporation to protect its valuable "Ethyl" trade-mark, destroys much of the value of its patent on the lead-treated fuel (a combination of anti-knock compound and gasoline), and virtually renders valueless its patent on the use of this lead-treated fuel in an internal combustion engine. In these respects, the decision conflicts with the principles established by this Court in *United States v. General Electric Co.*, 272 U. S. 476, and *General Talking Pictures Corp. v. Western Electric Co.*, 305 U. S. 124. See also *Standard Oil Co. v. United States*, 283 U. S. 163; *Inde-*

pendent Wireless Telegraph Co. v. *Radio Corp.*, 269 U. S. 459; *Adams* v. *Burke*, 17 Wall. 453.

Second: In substantially limiting the rights of a patentee in determining to whom the patented products may be sold, the decree places a patentee in a weaker commercial position than the manufacturer of an unpatented product, in conflict with settled decisions of this Court. See *United States* v. *Colgate & Co.*, 250 U. S. 300; *Virtue* v. *Creamery Package Co.*, 227 U. S. 8. Likewise, the decree fails to recognize the right of the owner of a trade-mark to protect himself against impairment of the good will which it represents. *Cf. Old Dearborn Distributing Co.* v. *Seagram Corp.*, 299 U. S. 183. The decision is thus of a far reaching importance in the entire field of patent law and the relation between patent, trade-mark, and anti-trust statutes.

Third: The issuance of the injunction in this case appears to be predicated upon mere assumptions by the lower court which not only are unsupported by evidence but in some instances fly in the face of the stipulated facts. For example, on the vital questions of insuring compliance with the Surgeon-General's regulations and of preventing adulteration and dilution of the patented product, although the court recognized that it had proved difficult to accomplish these ends without jobber licenses, it *assumed* that "this *apparently* was due to an unwillingness on the part of refiners to conduct their own investigations * * *." On these issues it therefore substituted its guess for the confirmed experience of the patentee. Its opinion (p. 9) states:

> "There does not appear to be any reason why this provision in the refiner-license agreements cannot accomplish its purpose when supplemented by investigations conducted by the defendant corporation itself, just as is presently done. The court is not concerned with determining defendants' future policies or practices re-

garding the enforcement of these health regulations, but the court is satisfied that the jobber licensing system is not the only method by which observance of the health regulations by jobbers can be enforced."

How the defendant corporation can conduct investigations of jobbers with whom it has no license agreements or as to whom it lacks any right to investigate, or how effective these assumed methods might be in protecting against violation of health regulations or adulteration or dilution, the lower court did not make clear. Obviously, it had no basis of record for its assumptions.

The decree destroys rights in patents and trade-marks upon unsupported inferences. It substitutes a court's speculation for a patentee's business judgment. It disregards the existence of patents upon which the license agreements rest. The law provides for review by this Court, and by this Court only. Clearly this Court has and should exercise jurisdiction.

Appended hereto is a copy of the Opinion of the District Court of May 19, 1939.

DEAN ACHESON,
Attorney for Appellants.

H. THOMAS AUSTERN,
Of Counsel.

EXHIBIT "A".

UNITED STATES DISTRICT COURT, SOUTHERN DISTRICT OF NEW YORK

E.84-321

UNITED STATES OF AMERICA,

Petitioner,

Against

ETHYL GASOLINE CORPORATION, EARLE W. WEBB AND JOHN COARD TAYLOR,

Defendants

Honorable LAMAR HARDY, By John Henry Lewin, Esq., Hammond E. Chaffetz, Esq., W. B. Watson Snyder, Esq., Grant W. Kelleher, Esq., Nelson A. Scharfman, Esq., Thurman Arnold, Esq., and Samuel E. Darby, Jr., Esq., for the Petitioner.

Messrs. COOPER, KERR & DUNHAM, By Drury W. Cooper, Esq., Harold W. Norman, Esq., and Robert S. Dunham, Esq., for Defendants.

BONDY, District Judge:

This is a suit in equity by the United States to enjoin the Ethyl Gasoline Corporation and its president and vice-president in charge of sales, from violating the Sherman Anti-Trust Act of July 2, 1890. The case has been submitted upon an agreed statement of facts.

The defendant corporation is engaged in the production and sale of a fluid, consisting principally of tetraethyl lead. This fluid is used in increasing the octane, or anti-knock, rating of gasoline. The mixture of this fluid with gasoline reduces or eliminates the knocking that normally occurs when a mixture of gasoline and air is burned in an automobile engine of relatively high compression.

The defendant corporation is the sole producer of tetraethyl lead fluid in the United States. It is the owner of United States letters patent which cover the anti-knock

fluid, the combination consisting of the fluid and gasoline, and the method whereby a mixture of gasoline and air is burned in a motor of relatively high compression, in the presence of vapors of an anti-knock ingredient. No other substance similar to tetraethyl lead fluid is manufactured or sold commercially. There are other competitive methods by which a high octane value of gasoline may be obtained. Most refiners, however, find it economical and advantageous to obtain a part of the anti-knock value of their regular and premium gasoline by the use of fluid. Approximately 70% of all gasoline manufactured and sold in the United States is treated with fluid, and approximately 85% of all gasoline sold in the United States which has been processed so as to obtain a high octane rating is treated with fluid.

The defendant corporation does not manufacture, refine or sell any gasoline. It manufactures fluid and sells it only to refiners licensed by it, who mix the fluid with their own gasoline pursuant to the regulations and directions prescribed by the defendant corporation. It derives its profits, which are very substantial, solely from the sale of fluid.

The greater part of all gasoline manufactured at refineries and the greater part of all gasoline treated with fluid is sold and transported in interstate commerce from the states in which the refineries are located into each of the other states of the United States.

The refining companies sell gasoline partly through wholesale and retail outlets owned and controlled by them. They also sell gasoline to independent retail dealers and consumers and to jobbers for resale to retail dealers and consumers. There are approximately 12,000 jobbers in the United States. They distribute a substantial part of all the gasoline sold and distributed in this country.

The defendant corporation has issued licenses to approximately 123 refiners, who together refine and sell about 88% of all the gasoline sold in the United States. All but one of the major refiners in this country have entered into such license agreements and all but two of the licensees treat with fluid substantially all of their regular or so-called house brands of gasoline. Defendant corporation

licenses the refiners to produce "Ethyl" gasoline and "regular" gasoline, by treating their gasoline with the fluid manufactured and sold by it. Ethyl gasoline has a higher octane rating than regular lead-treated gasoline. The former contains approximately one part of fluid to 1700 parts of gasoline and the latter one part of fluid to 4200 parts of gasoline. About 94% of all gasoline treated with fluid is regular gasoline.

The license agreements with the refiners require each refiner to maintain a minimum differential in price between his Ethyl gasoline and his best non-premium grade of gasoline, and provide that regular gasoline treated with fluid shall be sold as the next highest priced motor fuel below the refiner's Ethyl gasoline and shall be the refiner's best non-premium gasoline.

The refiners are permitted under their licenses to sell treated gasoline to such jobbers only as are licensed by defendant corporation to distribute treated gasoline. This provision has almost invariably been complied with by the refiner licensees. Jobbers desiring licenses are required to make application therefor through their prospective refiner-suppliers, who submit such applications to the defendant corporation. It issues separate licenses to jobbers for distributing Ethyl and regular treated gasoline. Approximately 11,000 of the 12,000 jobbers in the country have been granted such licenses. Numerous applications for jobber licenses have been denied. Many licenses were granted to persons to whom licenses were at first denied. Apart from the issuance of licenses to jobbers, the only business relations of defendant corporation with jobbers are in connection with the promotion of sales by jobbers of treated gasoline and the investigation of jobbers.

When tetraethyl fluid was first introduced, the question arose whether the manufacture, distribution and use of the fluid and of treated gasoline might not create a serious health hazard. An investigation was conducted by distinguished scientists appointed by the Surgeon General of the United States, who found that there was no serious menace to health if certain precautionary measures were taken. In conformity with the recommendations of the United States

Public Health Service, the license agreements with jobbers provide that jobber licensees shall maintain on pumps from which treated gasoline is dispensed, notices that the gasoline contains lead and is for use as a motor fuel only.

The jobber licenses prohibit dilution and adulteration of the treated gasoline. On the rare occasions when dilution or adulteration of regular treated gasoline has been discovered by the defendant corporation, it has ordinarily been necessary only to report the matter to the refiner-supplier, in view of the latter's interest in the quality of his product. Defendant corporation customarily investigates instances where the lead warning signs have not been placed upon the dispensing pumps, and where untreated gasoline has been substituted for treated gasoline in pumps bearing such signs. It also seeks to prevent dilution of Ethyl gasoline and deterioration of such gasoline through long storage in jobbers' or dealers' tanks.

The Ethyl Gasoline Corporation is the exclusive user of trade-marks embodying the words "Ethyl" and "Q" as applied to fluid. All licenses except one, include the word "Ethyl" as a part of the brand name under which Ethyl gasoline is sold. All licensees are required to display defendant corporation's registered trade-mark design whenever they sell, offer to sell or advertise Ethyl gasoline. Defendant corporation has registered this design and the word "Ethyl" in every state of the United States except one. It has extensively advertised the Ethyl trade-mark and Ethyl gasoline, and the refiner licensees have extensively advertised their respective brands of Ethyl gasoline. The defendant corporation, however, obligates its refiner and jobber licensees not to use its trade-marks, designs, or its name in the sale, offering for sale or advertising of regular lead-treated gasoline. It is stipulated that numerous users of gasoline would testify that the name "Ethyl" and the trade-mark design have become associated in their minds with high quality gasoline of high anti-knock qualities and that Ethyl indicates to them the use of lead in gasoline.

Since April, 1929, each applicant for a jobber license has been investigated by a field representative of the defendant corporation. These representatives exercise wide dis-

cretion in recommending the granting or refusal of jobber licenses and their recommendations largely determine whether a license will be issued. Officials of the corporation charged with reviewing these jobber reports have almost invariably adopted the field representative's recommendation when approved by his division manager. The action of the division manager in this regard is usually perfunctory.

A manual issued by the corporation to its field representatives states that the reason for investigations prior to the issuance of license agreements is to ensure that all marketers of Ethyl gasoline will be of a high type and will be people who will maintain the quality of the gasoline, protect the reputation that the Ethyl corporation has established for its product and will not resort to unethical methods in competing with other licensed jobbers and refiners.

Following the corporation's customary practice, its field representatives usually have not set forth the reasons why recommendations have been made against the issuance of licenses, largely due to its reluctance to preserve in its records the extent to which maintenance of gasoline prices and marketing policies by jobbers entered into the granting of licenses. Usually no records other than the reports themselves have been made or preserved disclosing the reasons why jobber licenses have been refused. The extent of the reliance placed by the corporation on the "business ethics" of jobbers has normally not been disclosed in its records and communications. Defendants employed the term "business ethics" to denote compliance with marketing policies and prevailing prices of the petroleum industry.

From April, 1929, to January, 1935, one of the questions appearing on the form of jobber report related to the "business ethics" of the jobber applicant. In January, 1935, this question was eliminated from the form of the jobber report, but the "business ethics" of the jobber have continued to be among the principal subjects of investigation. The findings of the field representatives with respect thereto are incorporated in the recommendations for or against the issuance of a license, made at the end of the report.

An adverse finding upon the "business ethics" of a prospective jobber licensee is alone in many instances sufficient

ground for defendant corporation to refuse such jobber a license. The greatest number of jobber applicants who were denied licenses (and numerous applications have been denied) were rejected on the basis of adverse findings of field representatives concerning the jobbers' "business ethics." In a number of instances where licenses were granted to jobbers whose practices were previously considered unsatisfactory, they were issued after representation that the jobber's marketing practices would be changed. In at least an equal number of instances licenses were refused by defendants after similar representations.

It is also stipulated that defendants have refused to issue licenses to a number of jobbers who, investigation showed, were not abiding by the marketing policies prevailing or ostensibly prevailing in the industry or who were not maintaining the retail prices on gasoline posted generally in the industry (that is, the policies of, and prices posted by, the major oil companies or the market leaders among such companies) or whose retail dealers were not maintaining such prices.

It is stipulated that testimony of witnesses for the Government would tend to establish that a large number of refiners and a majority of jobbers believe that a jobber must maintain "business ethics" in order to obtain a license, and that a number of jobbers believe that jobber licensees are required to maintain the prices and abide by the marketing practices and policies of the major oil companies.

Supplementary investigations of licensed jobbers are made from time to time by the defendants and reports thereon made on the same report forms as are used for the initial investigation. The operations of jobber licensees have been investigated partly to determine whether they were maintaining the marketing policies, practices and prices prevailing or ostensibly prevailing in the industry. In the corporation's instructions to its field representatives, it states that through these supplementary investigations it has been able to correct the Ethyl marketing picture to a considerable extent and has succeeded in eliminating from its jobber lists some of its former accounts which were not a credit to it.

Some of the division managers and field representatives have from time to time reported to the jobbers' suppliers that jobbers have not been abiding by the suppliers' marketing policies and practices, and there have been sporadic instances in which representatives of defendant corporation in cooperation with the suppliers, have persuaded jobbers to market gasoline in accordance with the suppliers' marketing practices.

Some applications for Ethyl jobber licenses and a few for regular gasoline jobber licenses have been refused because the volume of business of the jobber was not sufficient, in the opinion of defendant corporation, to move the gasoline with sufficient rapidity to avoid deterioration in storage. A number of jobber licenses have been refused because in the opinion of defendant corporation the physical equipment of the jobber lent itself to the actual or accidental mixing of different grades or brands of gasoline, or the retail outlets of the jobber were shabby or disreputable in appearance or location, or the jobber's reputation in his community was bad, of the jobber had a record of tax evasion, dilution, substitution or misbranding.

Defendant corporation has issued licenses to a number of jobbers who, investigation showed, were not abiding by the prices prevailing or ostensibly prevailing in the industry or who were not maintaining retail prices on gasoline posted generally in the industry or whose retail dealers were not maintaining the prices prevailing or ostensibly prevailing in the industry.

Defendant corporation has investigated the operations of jobber licensees to determine the method of securing supplies, gallonage, pump markings, facilities of bulk plant and nature of other physical equipment, number, character and appearance of outlets and sales effort.

Defendants have not issued any statement or instructions to the effect that they would cancel licenses for the failure to maintain "business ethics" and there has been and is a great deal of cutting of prices below the posted prices on the part of licensed refiners, including major oil companies, and licensed jobbers. Jobber licenses have not been cancelled because of the failure of a jobber to maintain the

policies, practices and prices of the major oil companies or market leaders. There are numerous instances where jobber licensees have not followed the marketing practices prevailing or ostensibly prevailing in the industry and where jobber licensees have not maintained retail prices posted generally in the industry concerning whom no action has been taken by defendants. Except in cases of breach of license agreement, or where the jobber's contract with his supplier had not been terminated (in which case the jobber's existing license was continued in effect) defendant corporation in most cases has granted a new license to a jobber who wanted to change his source of supply, irrespective of the jobber's maintenance or non-maintenance of the policies, practices and prices of the major oil companies or market leaders. In a few instances it has not done so.

The petition prays that the monopoly, combination and conspiracy described therein be declared illegal and in violation of the Sherman Anti-Trust Act; that the defendants be enjoined from continuing the unlawful practices described and, particularly, from exacting agreements from the refiners limiting the sale of lead-treated gasoline to such jobbers only as defendants license or otherwise designate, and from requiring jobbers to procure licenses.

The Government in its brief states that "this case is concerned only with the legality of that part of the defendants' licensing system and practices which relates to gasoline jobbers, whereby refiner licensees have each agreed with defendant corporation to sell fluid treated gasoline to such jobbers only as have received licenses from the defendant corporation."

The Government contends that the defendants have imposed unlawful restraints, first, upon jobbers to whom licenses have been issued, by compelling them to participate in agreements or understandings to maintain resale prices, and second, upon jobbers to whom licenses have been denied, who have been excluded from the market as a result of defendants' agreements with the refiner licensees.

First. A price maintenance agreement between a manufacturer or trader and his dealers is forbidden by the Sherman Act. Dr. Miles Medical Co. *v.* John D. Park & Sons Co.,

220 U. S. 373. The interdiction of the statute extends to informal agreements implied from a course of dealing or other circumstances. United States *v.* A. Schrader's Son, Inc., 252 U. S. 85; Federal Trade Commission *v.* Beech-Nut Packing Co., 257 U. S. 441; cf. Frey & Son, Inc. *v.* Cudahy Packing Co., 256 U. S. 208. No immunity is conferred by the fact that the article whose price is being regulated is a patented product. Bauer & Cie. *v.* O'Donnell, 229 U. S. 1; Straus *v.* Victor Talking Machine Co., 243 U. S. 490.

In the absence of an agreement or understanding between them, or of the suppression of the freedom of competition by methods in which the manufacturer secures the cooperation of his distributors and customers, Federal Trade Commission *v.* Beech-Nut Packing Co., 257 U. S. 441, 455, it is not unlawful for a manufacturer to suggest resale prices to his dealers, refuse to sell goods to those who do not maintain those prices and announce to the trade that such is his policy. United States *v.* Colgate & Co., 250 U. S. 300; Frey & Son, Inc. *v.* Cudahy Packing Co., *supra*. These activities are considered lawful incidents of the right of a "trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal." United States *v.* Colgate & Co., 250 U. S. 300, 307. The investigation by a manufacturer of the price policies of his dealers is not *per se* unlawful. Toledo Pipe-Threading Machine Co. *v.* Federal Trade Commission, 11 F. (2d) 337; Cream of Wheat Co. *v.* Federal Trade Commission, 14 F. (2d) 40, although when combined with other significant facts, it may support a finding of unlawful price control. Federal Trade Commission *v.* Beech-Nut Packing Co., *supra*.

It is evident that while the distinctions between lawful and unlawful activities may be quite clear in theory, it is not always easy in practice to determine whether the trader has kept within the bounds of his privilege. It is unfortunate, therefore, that the present case has been submitted upon an agreed statement of facts, thus depriving the court of the benefit of the direct testimony of witnesses.

The defendant corporation, although neither a manufacturer of, nor trader in, lead-treated gasoline, concededly

takes an interest in and investigates, the price policies of its jobber licensees and of applicants for jobber licenses, and it is also admitted that jobbers have been refused licenses because their price policies were offensive to the defendant corporation. But although a majority of jobbers believe that a jobber must have maintained resale prices in order to obtain a jobber license and a number of them also believe that they are required to maintain prices after the issuance of a license, there is no evidence that the defendants have informed any jobber to that effect and it affirmatively appears that defendants have not issued any statement or instructions that they would cancel licenses for failure to maintain prices. Moreover, there has been and is a great deal of price cutting on the part of licensed jobbers, yet licenses have not been cancelled for that reason.

It is stipulated that in a number of instances where licenses were granted to jobbers whose "practices" were previously considered unsatisfactory, they were issued after representation that the jobbers "marketing practices" would be changed; that some of the defendant corporation's employees have from time to time reported to the jobbers' suppliers that jobbers have not been abiding by the suppliers' "marketing policies and practices", and that there have been sporadic instances in which representatives of defendant corporation, in cooperation with the jobbers' suppliers, have persuaded jobbers to market gasoline in accordance with the supplier's "marketing practices". The Government relies heavily upon these facts. But it is not certain that the "marketing policies" and "marketing practices" referred to, include "price policies", in view of the separate and apparently distinctive use of these terms in the stipulation of facts. Although the stipulation of facts defines "business ethics" as including the "marketing policies and prevailing prices of the petroleum industry", it does not state that "marketing policies" or "marketing practices" are synonymous with "price policies".

A clear case of price maintenance thus is not made out, especially in view of the indefinite language of the stipulation. That an agreement or understanding for the maintenance of prices existed between defendants and their jobber

licensees is perhaps a permissible but not a necessary conclusion from the stipulated facts. As the case can be disposed of on other grounds, it is unnecessary to pass upon this issue.

Second. The Ethyl Gasoline Corporation has entered into license agreements with approximately 123 refiners, who together refine and sell about 88% of all the gasoline sold in the United States. These include all except one of the major refiners in this country. Each of the refiner license agreements provides that lead-treated gasoline may be sold to those jobbers only who are licensed by the defendant corporation and this provision is almost invariably complied with by the refiner licensees. Since the defendants have denied numerous applications for jobber licenses, many persons desiring to engage as jobbers in the sale of lead-treated gasoline, which comprises about 70% of all the gasoline manufactured and sold in the United States, have been excluded from the market. The unsatisfactory "business ethics" of the jobbers has been the principal reason for such exclusion.

This provision of the refiner license agreements clearly is in restraint of trade. Each agreement calls for cooperative action between the defendant corporation and its refiner licensee in the exclusion of unlicensed jobbers from the market. While a manufacturer or trader may refuse to deal with those who do not observe the resale prices suggested by him, he may not combine or enter into agreements with intermediate distributors to cut off the supplies of such dealers. Victor Talking Machine Co. *v.* Kemeny, 271 Fed. 810; Straus *v.* Victor Talking Machine Co., 297 Fed. 791; cf. Federal Trade Commission *v.* Beech-Nut Packing Co., supra. Although this record may not warrant a finding that the refiner licensees have entered into a combination or conspiracy with each other and with the defendants, the conceded facts are that one hundred and twenty-three exclusion agreements have been separately made by the defendants and their refiner licensees. Each such agreement deprives the unlicensed jobber of one source of supply, while the aggregation of agreements deprives him of all access to the lead-treated gasoline market. Defendants,

through these separate agreements, have accomplished what the refiners, without the defendants' aid, could achieve only by a concerted refusal to deal with the jobbers who did not maintain "business ethics". The defendants can fare no better with their system of separate agreements than could the refiners if they formed such a combination. See Dr. Miles Medical Co. *v.* John D. Park & Sons, 220 U. S. 373, 408. The agreements between the defendants and their refiner licensees accordingly constitute a forbidden restraint of trade. Cf. Straus *v.* American Publishers' Association, 231 U. S. 222; Eastern States Retail Lumber Dealers' Association *v.* United States, 234 U. S. 600; Binderup *v.* Pathe Exchange, 263 U. S. 291; United States *v.* American Livestock Commission Co., 279 U. S. 435; United States *v.* First National Pictures, Inc., 282 U. S. 44; United States *v.* Sugar Institute, 297 U. S. 353.

The defendants, attempting to establish the reasonableness of their actions, Standard Oil Co. *v.* United States, 221 U. S. 1; United States *v.* American Tobacco Co., 221 U. S. 106; Sugar Institute, Inc. *v.* United States, 297 U. S. 553; Interstate Circuit, Inc. *v.* United States, decided by the Supreme Court February 13, 1939, contend that they have the right to require that jobbers dealing in lead-treated gasoline be licensed, in order to preserve the trade-marks, good will and reputation of defendant corporation in lead-treated gasoline, to protect the public from adulteration and to secure compliance with the regulations proposed by the Surgeon General of the United States governing the sale of lead-treated gasoline to the public. These objectives, however, bear no relation to, and, in the absence of statutory permission, do not require or justify, the exclusion from the market of jobbers because their marketing or price policies are repugnant to the defendants. It is because the defendants have not confined themselves to the attainment of the ends mentioned but have used their licensing system for other purposes that the Government seeks to restrain their licensing activities. Cf. Sugar Institute, Inc. *v.* United States, 297 U. S. 553, 599, 601.

Defendants maintain that they are vitally interested in protecting the health of persons handling lead-treated gaso

line and in securing compliance with the regulations proposed by the Surgeon General of the United States. While it may be true, as the Government contends, that the health hazard relates to the handling of the tetraethyl fluid itself and not to the fluid-treated gasoline, the court can not say that the defendants have not a legitimate interest in the maintenance of lead warning notices on the pumps from which treated gasoline is dispensed to the public, which apparently is the only one of such health regulations applicable to the handling and distribution of treated gasoline by jobbers.

The refiner licenses contain a provision, which is not attacked in this suit, requiring refiners, first, to obligate their jobbers to comply with the health regulations and to impose similar obligations upon purchasers from them for resale, and second, to reserve the right to cancel contracts of sale in the event that the jobber does not comply with such regulations. Defendants contend that the refiner has been tried and found wanting, but this apparently was due to an unwillingness on the part of refiners to conduct their own investigations of the jobbers' retail outlets. There does not appear to be any reason why this provision in the refiner license agreements can not accomplish its purpose when supplemented by investigations conducted by the defendant corporation itself, just as is presently done. The court is not concerned with determining defendants' future policies or practices regarding the enforcement of these health regulations, but the court is satisfied that the jobber licensing system is not the only method by which observance of the health regulations by jobbers can be enforced. Moreover, as the Government points out, there would seem to be a complete absence of any temptation on the part of jobbers to avoid compliance with the regulations concerning lead warning signs since these signs are supplied by the Ethyl corporation at a charge of only seven cents each.

It is equally evident that whatever interests the defendant corporation has in preventing dilution, adulteration and deterioration of treated gasoline in the hands of jobbers may be protected without any resort to the jobber license device. Cf. International Business Machines Corp. *v.* United States, 298 U. S. 131, 139, 140.

Defendants seek to avoid the effect of the anti-trust laws and to support their requirement that jobbers be licensed on the ground that they are merely taking advantage of their patent rights, relying upon the nature of patent monopoly and the decision of the Supreme Court in United States *v.* General Electric Co., 272 U. S. 476.

The defendant corporation concededly is entitled to the full benefit of its patents. But the rights which attach to the ownership of a patent are not limitless. The courts have frequently defined and limited the scope of the patent monopoly.

In the General Electric case, 272 U. S. 476, 489, 490, the Supreme Court established the principle that a patentee may grant a license "upon any condition the performance of which is reasonably within the reward which the patentee by the grant of the patent is entitled to secure," and may restrict the selling of the patented article by his licensee by limiting the method of sale and price, "provided the conditions of sale are normally and reasonably adapted to secure pecuniary reward for the patentee's monopoly." See also General Talking Pictures Co. *v.* Western Electric Co., 305 U. S. 124, 127. The reasoning in both cases establishes that the legality of the conditions imposed by the patentee upon his licensee is a question to be determined by the court and not, as contended by defendants, a question of policy reserved for the judgment of the patentee. In the General Electric case both the patent owner and its licensee manufactured and sold the patented product. The court merely decided that the patent owner could fix the prices and prescribe the method of sale of the patented product manufactured by the licensee in order to sustain the prices at which the former sold the patented product. See E. Bement & Sons *v.* National Harrow Co., 186 U. S. 70; Straight Side Basket Corp. *v.* Webster Basket Co., 82 F. (2d) 245, 246.

The defendant corporation does not charge any royalty for the use of its patents, nor does it manufacture, refine or sell any gasoline, whether treated with fluid or not. It is engaged only in the sale of fluid and derives its profits solely from the sale of fluid to its refiner licensees. Its pecuniary interest, if any, in the marketing and price policies of the jobbers selling gasoline is obviously very remote. Cf. Dr.

Miles Medical Co. *v.* John D. Parks & Sons Co., 220 U.
373, 407; Bauer & Cie. *v.* O'Donnell, 229 U. S. 1, 16. Mor
over, the Ethyl Gasoline Corporation does not itself dete
mine the prices or policies, the failure to abide by which h
often resulted in the denial of a jobber license. They a
the prices and policies established by some of the refin
licensees, apparently without consulting the defendant co
poration. There is no evidence that the refiner license
can not adequately protect such interests as they may la
fully have in the maintenance of the resale prices of the
jobber customers, without any intervention by the Eth
corporation.

General Talking Pictures Co. *v.* Western Electric C
supra, involved a limitation in a license to manufacture a
sell a patented product, restricting the licensee to sales
the product for private use in radio reception, as disti
guished from commercial use in talking picture equipmen
Since the patentee therein retained the right to license oth
persons to manufacture and sell the product for use in t
commercial field, the limitation obviously bore a direct rel
tion to the patentee's pecuniary reward. The Ethyl Gas
line Corporation, however, does not restrict sales of treate
gasoline by refiners to licensed jobbers so as to enable it
exploit sales to the excluded group in some other way.
Rather its restrictions result in the perpetual exclusion
non-licensed jobbers from the market of lead-treated gas
line, thus depriving its refiner licensees of the opportuni
to sell to the excluded group.

In so far, therefore, as the provisions of the refiner licen
agreements are used to exclude from the market jobbe
who do not maintain "business ethics", the court believ
that they are not conditions "normally and reasonab
adapted to secure pecuniary reward for the patentee
monopoly." United States *v.* General Electric Co., 272 U.
476, 490.

The defendant corporation attempts to identify its po
tion with that of a manufacturer or trader, and conten
that, as the latter possesses the privilege of selecting h
own customers, see United States *v.* Colgate & Co., 250 U.
300, so the defendant corporation may select the jobbe
to be licensed, upon any basis satisfactory to itself. Th

argument, however, ignores the fact that the defendant corporation is not selecting its own customers when it determines what jobbers may sell lead-treated gasoline. The Ethyl Gasoline Corporation manufactures tetraethyl fluid; its sole customers are its refiner licensees. Its selection of refiner licensees is not under attack. The jobber is in no sense a dealer in the article manufactured by this corporation. The jobber is a dealer in lead-treated gasoline, of which the defendant corporation produces merely an ingredient. It is the refiner and not the Ethyl Gasoline Corporation, who produces lead-treated gasoline. The government does not question the right of each refiner licensee to make an independent selection of his jobber customers.

The facts of the case do not fall within the permissive provisions of the amendment to section one of the Sherman Anti-Trust Act effected by the Act of August 17, 1937, 50 Stat. 693, 15 U. S. Code, Sec. 1, and the defendants do not contend that this amendment has any application to the facts of this case.

The court accordingly is of the opinion that the agreements between the Ethyl Gasoline Corporation and its refiner licensees restricting sales of treated gasoline to those jobbers only whom the former licenses, unreasonably restrain trade and are violative of the Sherman Anti-Trust Act.

The defendants accordingly will be enjoined from requiring jobbers to procure licenses for handling lead-treated gasoline and from requiring refiners to sell lead-treated gasoline to such jobbers only as defendant corporation licenses or otherwise designates.

Submit proposed findings of fact and conclusions of law in accordance herewith.

May 19, 1939.

WM. BONDY,
United States District Judge.

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No. 536

Supreme Court of the United States

OCTOBER TERM, 1939

ETHYL GASOLINE CORPORATION, EARLE W. WEBB AND JOHN COARD TAYLOR, *Appellants*,

v.

THE UNITED STATES OF AMERICA

ON APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK

BRIEF FOR APPELLANTS

DEAN G. ACHESON,
H. THOMAS AUSTERN,
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Supreme Court of the United States

OCTOBER TERM, 1939

No. 536

ETHYL GASOLINE CORPORATION, EARLE W. WEBB AND JOHN COARD TAYLOR, *Appellants*,

v.

THE UNITED STATES OF AMERICA

ON APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK

BRIEF FOR APPELLANTS

OPINION BELOW

The opinion of the District Court (R. 43) is reported in 27 F. Supp. 959.

JURISDICTION

This is a suit in equity brought by the United States under Section 4 of the Sherman Anti-Trust Act of July 2, 1890, as amended, 26 Stat. 209, 36 Stat. 1167, 15 U. S. C. Sec. 4, seeking to enjoin appellants from executing or continuing certain agreements and practices alleged to be in restraint of trade in violation of Section 1 of that Act as amended, 26 Stat. 209, 50 Stat. 693, 15 U. S. C. Sec. 1. The district court had

jurisdiction under Section 24 (23) of the Judicial Code, 36 Stat. 1093, 28 U. S. C. Sec. 41 (23).

The final decree of the district court ordering cancellation of certain patent license agreements and prohibiting future acts or agreements was entered on August 14, 1939. (R. 62.) An appeal was allowed by the district court on October 9, 1939. (R. 69.) The jurisdiction of this Court to review the decree of the district court upon direct appeal is conferred by Section 2 of the Expediting Act of February 11, 1903, as amended, 32 Stat. 823, 36 Stat. 1167, 15 U. S. C. Sec. 29, and Section 238 of the Judicial Code, as amended, 36 Stat. 1157, 38 Stat. 804, 43 Stat. 938, 28 U. S. C. Sec. 345. Probable jurisdiction was noted on December 11, 1939.

STATUTE INVOLVED

The text of Section 1 of the Sherman Act of July 2, 1890, 26 Stat. 209, as amended by the Act of August 17, 1937, 50 Stat. 693, 15 U. S. C. Sec. 1, is set out in full in the Appendix.

STATEMENT

This is an appeal from a decree enjoining the defendant Ethyl Corporation from continuing, under its patents on anti-knock motor fuel and the method of using such fuel, to license jobbers to handle the patented product and to require licensed refiners to sell it only to licensed jobbers. The injunction is based on the decision of the lower court that this system of licensing is not necessary to achieve interests of the patentee which it recognized as proper, and was used, in violation of the Sherman Act, to

exclude a small group of price-cutting jobbers from dealing in the patented product.

The defendant corporation has four basic patents on an anti-knock compound, on an anti-knock motor fuel, and on the method of using such fuel in internal combustion engines. The validity of these patents is not in issue. Their commercial development has been made possible by the evolution of a licensing system designed to fit into the existing vast oil refining and automobile manufacturing industry of the United States, attract and hold the good will of motorists for the patented fuel, and insure compliance with safeguards which the Public Health authorities had laid down as essential in the marketing of a dangerous product.

This licensing system embraced the licensing under the product and method patents of both the refiners who manufactured the patented motor fuel and the jobbers who in large part distributed it to the public. It supplemented the trademark identification of the patented motor fuel as the product sponsored by the patentee and produced under its supervision. And, of cardinal importance, the direct jobber licenses afforded the only method which experience demonstrated to be effective of securing on the part of all those handling the patented fuel adherence to the requirements laid down by the Surgeon General of the United States. The keystone of this system is the requirement that sales of the patented product may be made by licensed refiners only to jobbers licensed to distribute it and to authorize the use of the patented method for its employment.

The Government does not attack the validity or scope of the patents. It does not assail the refiner

licenses. It does not question the desirability of protecting the quality of the product from adulteration and dilution or the basic necessity for safeguarding the public health. It asserts that the system of licensing jobbers and limiting refiners to selling only to such licensed jobbers lent itself to use, and was in fact used, for a collateral purpose unrelated to any interest of the patentee—namely, the maintenance of refiners' prices on the patented and other unpatented motor fuels. Specifically, it alleged in its petition that jobbers were required to maintain refiners' prices under threat of cancellation of their individual licenses, and that the issuance of the licenses was conditioned upon prior maintenance of such prices. Because of this alleged misuse the Government asked that all existing and future jobber licenses, and the corollary requirement that licensed refiners sell only to licensed jobbers, be wholly abrogated by injunction. For the protection of the patentee's legitimate interests, which they recognized as lawful, Government counsel urged that as a matter of business judgment there were other and presumably better methods than jobber licenses.

In the court below both litigants were apparently completely confident of their divergent legal positions—the patentee, in its view that it had not exceeded the scope of the patent law in thus conditioning the sale and use of its patented inventions; and the Government, in its belief that there was no legal justification whatever for jobber licenses. Accordingly, the case was presented to the district court on a lengthy Stipulation which contains elaborate, overlapping, and to some extent inconsistent, state-

ments of fact designed to support the respective positions.[1] In addition, certain original materials, such as the patents, license agreements, trademarks, reports, etc., were included as stipulated exhibits.

The learned district judge wrote a lengthy opinion in which he demonstrated the difficulties encountered in resolving the complex questions presented. He concluded that it had not been established that the jobber licenses—issued to over 92% of all of the jobbers—had been used to secure maintenance of refiners' prices. He determined, however, that the refusal of a jobber license had in a few instances been based upon the previous record of the jobber as a price cutter and concluded that this was in violation of the Sherman Act. He further found that the interests which the patentee sought to protect by the jobber license system were legitimate and important. Nevertheless, he accepted the business judgment of Government counsel instead of the recorded experience of the patentee as to whether these interests could be efficiently protected other than by jobber licenses. On this basis, he decreed not an injunction forbidding the particular practices which he deemed to be unlawful but the abrogation of the entire jobber licensing system.

Thereafter the lower court entered findings which incorporated by reference as formal findings of fact

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[1] In keeping with this theory of presentation, all evidentiary objections were waived except the right to object on the grounds of *relevancy* or *materiality* to the agreed facts. See Stipulation, Introductory Paragraph (R. 18).

by the court all of the materials in the Stipulation and, in addition, certain ultimate findings of fact, presumably derived from the Stipulation upon which it based the injunction. At the same time the court entered a stay order pending determination of the cause in the event of an appeal.

It is appellants' position on this appeal that the jobber licensing system represented the exercise of rights derived from the Ethyl Corporation's ownership of the patents on lead-treated fuel and the method for using the patented fuel, and that the licenses contain only provisions which are reasonably necessary for the commercial development of these patents and for securing financial return from them. It contends that in the negligible number of instances in which the previous pricing policy of the jobber was made the basis for the refusal to license a jobber, the patentee was likewise exercising rights conferred by the patent law, and that the exclusion of a relatively few price-cutting jobbers from the right to deal in its patented motor fuel (and in turn to authorize the employment of such fuel by others under appellants' method patent) did not constitute an unlawful restraint of trade. Finally, appellants contend that, even assuming *arguendo* that the refusal to license a few price cutters was unlawful, there is no warrant whatever for a sweeping injunction abrogating the entire jobber licensing system. The drastic decree is founded on assumptions unwarranted and contradicted by the record. It is unnecessary to prevent recurrence of the few instances of conduct alleged to be unlawful. It hamstrings the patentee in

its commercial development of its inventions under any changed conditions in a dynamic industry. In its use of a judicial broadaxe, the decree is a flagrant abuse of discretion.

The issues thus posed for determination concern an asserted conflict between the patent law and the anti-trust acts. As in most cases under the Sherman Act, the facts in the present appeal are controlling. The degree to which the licensing system was or was not within the patent monopolies or possibly productive of unlawful restraint of trade is dependent upon the scope of the patents, the commercial framework within which they had to be developed, and an understanding of what was done in making the inventions available to the public. We therefore direct the Court's attention to the following summary of the case in which we first examine what was invented and covered by the patents.

1. THE INVENTIONS AND THE PATENTS

In an internal combustion engine, such as that used in an automobile, tractor, or airplane, a gaseous mixture of vaporized fuel and air is ignited by an electric spark and the burning gases expand to push the piston and furnish power. Before ignition this gaseous mixture is compressed in the cylinder by the piston moving upward. The greater the degree to which the gaseous mixture is compressed before being ignited, the higher will be the engine's efficiency —it will develop more power and run longer on a given amount of fuel, or it may be made smaller and lighter for a particular use. (Stip. Fols. 62-63, R. 18-

19).[2] The efficiency and power for size of the present-day automobile engine would undoubtedly be impossible without high compression motors.

Early in the development of the American motor car, however, it was discovered that when a mixture of air and the gasoline then available was subjected to a relatively high compression, a fuel "knock" was produced, the engine heated rapidly, its efficiency was reduced, and, if the initial pressure was very high, engine parts might be injured.[3] (Exh. 3-A, R. 75.) The rapid increase in the number of automobiles aggravated the "knock" problem by multiplying the demand for gasoline, and at the time of the patent applications the tendency was

> "to produce lower grades of gasoline in order to obtain a sufficient output . . . and to reduce the compressions of the engines so that these lower grades of fuel may be used without knocking." (Exh. 3-A, R. 75.)

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[2] References to the Stipulation will be by folio number and record page; to the accompanying exhibits by record page alone. Unless otherwise noted, italics have been supplied.

[3] The highest pressure at which a fuel may be used without these results is known as its "critical compression pressure." With the development of the art following the inventions under discussion, this pressure has come to be expressed in terms of "octane number." The "octane number" of a fuel, generally stated, is the rating on a convenient arbitrary scale of its critical compression pressure, that is, the compression to which a mixture of such fuel and air may be subjected without causing a "knock" and consequent loss of power in an internal combustion engine. (Stip. Fol. 63, R. 19) The critical compression pressure of a fuel will be referred to in this Brief as its "anti-knock value" or by "octane number."

The lowering of engine compression reduced efficiency[4] and in turn required a greater output of fuel.[5] It likewise meant the costly, large engines under mammoth hoods which once characterized the American motor car.

The basic invention from which the defendant corporation's four patents are derived was the brilliant and completely novel discovery, after years of research, that burning the mixture of hydrocarbon fuel and air in the presence of very small amounts of certain volatile *metallic compounds* would tremendously increase the point to which the mixture could be compressed without knocking.[6] Without reviewing in detail the teaching of the patents, it may be noted that the use of a metallic compound which is both oil soluble and volatile was stated to afford the highest anti-knock value. Among many others disclosed by the patent is the compound tetraethyl lead which has been found most efficient. (R. 76-77.)

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[4] Engines of high compression may also be made to operate without knocking, on fuels of lower critical compression, by retarding the spark, but this results in loss in both power and economy. (Stip. Fol. 63, R. 19.)

[5] Compare the development of the demand for gasoline in these early years, as summarized by this Court in *Standard Oil Co.* v. *United States*, 283 U. S. 163, 177-178.

[6] The revolutionary character of the invention may be seen from one of the examples given in the patent specifications: A motor fuel having a critical compression pressure of only 75 pounds may be used in an engine having a compression of 160 pounds, and for the same load *twice* the mileage obtained when such fuel is burned in the presence of these metallic compounds. (Exh. 3-A, R. 75-76.)

A. THE METHOD OR USE PATENT

Since the underlying research and basic discovery had to do with what went on inside the cylinder of the internal combustion engine in the compression, burning, and knocking of hydrocarbon fuels, and in the burning of such fuels in the presence of specified metallic compounds, the Patent Office requested a division between product and process claims and allowed a basic method patent, No. 1,787,419. (R. 83-84.) Since the invention could be practised by introducing tetraethyl lead compounds into the combustion chamber or manifold of the engine separately from the gasoline with which it is to be burned (Stip. Fol. 65, R. 20), this patent merely recognized the fundamental character of the discovery. Claim 1 read:

> "A method of utilizing a low compression motor fuel which comprises forming a combustible mixture of the fuel and air, and burning the mixture under a relatively high compression in the presence of vapors of a compounded metallic element." (Exh. 3-D, p. 2, R. 84.)

It is important, in tracing and understanding the commercial development of these inventions, to note that this patent covered the *use by any motorist* in any high compression automobile of an anti-knock motor fuel containing tetraethyl lead. *Tilghman* v. *Proctor*, 102 U. S. 707, 722; *Carnegie Steel Co.* v. *Cambria Iron Co.*, 185 U. S. 403; *Eibel Process Co.* v. *Minnesota & Ontario Paper Co.*, 261 U. S. 45; *Smith* v. *Snow*, 294 U. S. 1.

B. THE PRODUCT OR FUEL PATENT

The product itself, a *fuel* containing a hydrocarbon and an oil soluble volatile metallic compound, was covered by Patent No. 1,573,846. (R. 73-78.) Claims 2 and 21 are illustrative:

> "2. A fuel for internal combustion engines comprising a low compression motor fuel, and an oil soluble volatile compound of a metal adapted to increase the critical compression pressure of the motor fuel."
>
> "21. A fuel for internal combustion engines comprising gasoline; and tetraethyl lead."

This product patent concededly covers the manufacture, sale, and use of any motor fuel consisting of gasoline and tetraethyl lead. It is immaterial that the amount of the latter compound is very small. The *combination* is new and represented at the time a brilliant revolutionary invention. *Seabury* v. *Am Ende*, 152 U. S. 561.

C. THE IMPROVEMENT PATENTS

Further research resulted in two other patents, applications for which were filed one and three years later. It was found that the lead oxide resulting from the burning even of minute quantities of tetraethyl lead might flux with and have a deleterious effect upon spark plugs, valve stems, and other motor parts. These two patents cover the invention under which various halide compounds (i. e., chlorides and bromides) are additionally used with the anti-knock ingredients so that when the lead compound is burned the product formed by combustion (*e. g.*, lead bromide) will not cause these injurious effects. The

claims of these two patents cover both the fuel containing tetraethyl lead plus these halides, as well as the so-called "*fluid*," a mixture of tetraethyl lead and these other compounds in a convenient form to be added to gasoline or kerosene to form the patented fuel.

2. COMMERCIAL BACKGROUND FOR UTILIZATION.

Industrial development, even of patented methods or products, cannot be divorced from the markets in which they can find use. *Theoretically,* defendant corporation upon its organization might have licensed every motorist who desired to use anti-knock fuel in his motor car.[7] *Theoretically,* it might itself have manufactured the patent fuel, by refining or buying gasoline and blending it with anti-knock fluid, and then have sold the product in competition with existing refiners. But the practical choice and the licensing methods developed, however, resulted from the combination of (a) the need for encouraging the manufacture of automobiles with high compression engines; (b) the economic desirability of using the existing and abundant refining and distribution facilities in the oil industry; (c) the unfortunate development of public apprehensions as to the safety of its product and the issuance of regulations

[7] Indeed, this was one of the earliest approaches to the problem, and the same inventor secured a patent for an injector mechanism to be attached to each motor car so that "the desired result may be accomplished by injecting the anti-knock material into the combustion chamber immediately before combustion takes place." United States Patent No. 1,501,568. It turned out that the toxic nature of tetraethyl lead, however, would have made the use of this method dangerous to the public.

by the Surgeon General of the United States; and (d) the necessity for creating an independent consumer demand and for ensuring, through trademarking and protection from adulteration and misbranding, public confidence in the patented product to be sold at a slight premium over regular motor fuel. The aim was to make its discoveries early and widely available to the public at a reasonable price in the expectation that a small unit return would aggregate an adequate reward. Thus the public interest in early use of the inventions and the patentee's interest coincided.

A. HIGH COMPRESSION ENGINES

The patented fuel for use under the patented method was valuable particularly in high compression engines. Largely to the extent that the defendant corporation could encourage the building of motor cars with such engines would the public be able to take advantage in increased power and mileage economy of the discoveries patented. Motor car manufacturers obviously would not design, make, and sell automobiles adapted to use anti-knock fuel of a high octane number unless there was a supply of such fuel available throughout the land at a reasonable price. Certain it was that they would not make a car which the purchaser could not efficiently use unless he secured a license directly from defendant corporation. These conditions dictated that the patented fuel be made rapidly and widely available, at a premium not substantially in excess of ordinary fuel, and that in some fashion the purchase of such fuel impliedly carry a license to employ it under the patented method.

B. EXISTING REFINING AND DISTRIBUTING FACILITIES

Although the new fuel was revolutionary in effect, at the time of its invention there existed a highly organized major industry for the manufacture and distribution of ordinary gasoline. There were refiners of gasoline who sold directly to the public under their own trademarks and through their own retail outlets. These refiners also sold to jobbers in tank car lots and to independent retailers in tank wagon lots. The jobbers maintained bulk storage facilities from which they distributed gasoline to their own retail outlets and to independent service stations. The refiners were thus manufacturers, wholesalers, and retailers. The jobbers of whom there were about 12,000 distributing a substantial part of American motor fuel, were in turn both wholesalers and retailers. (Stip. Fols. 70-71, R. 24-25.)

Apart from the difficulties of public health protection and quality control (discussed below), it was obvious that the distribution of the patented lead-treated fuel, and the implied licensing under the use patent, could be economically achieved only by utilizing these existing facilities. There was ample refining and mixing capacity. For defendant corporation to have constructed additional facilities for blending gasoline purchased from refiners, or to have manufactured its own gasoline, would have been wasteful and would have increased the cost of lead-treated fuel. Moreover, the manufacture of tetraethyl lead was a difficult and, it was later shown, a dangerous operation. While the mixing of anti-knock ingredients with gasoline to form the patented fuel was simpler, there were major health hazards in

handling the anti-knock ingredients. These, as well as the technical necessity for preventing mixture of the fluid with certain unsuitable or corrosive types of gasoline (*e. g.*, containing excessive sulfur or gum or of inadequate volatility, etc., R. 104-05, 113-14) made it clear that close control would be necessary over the mixing operation to form the patented fuel.[8]

These considerations made it clear that the most economical and efficient method for making a supply of the new patented fuel available to the public would be to utilize through some licensing system the existing refining and distributing facilities. In doing so some method for ensuring the quality of the patented product—which would sell at a slightly higher price than other unpatented fuel—would be necessary. But of prior and primary importance in determining how to use the existing distribution machinery was the impact of the public health controversy which resulted in regulations necessitating control not only of the manufacture of anti-knock compound and mixture to make the patented fuel but also the handling of such fuel right down to the point of retail sale.

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[8] Such mixing or blending of the anti-knock compound with gasoline to form the patented fuel at filling station pumps had been a very early practice. (Stip. Fol. 65, R. 20.) But not only was the quality of the fuel produced hard to control, but it also developed later that the public health regulation, discussed below, would preclude mixing or blending at either retail filling stations or jobbers' bulk storage plants. (R. 86-100, 131-36.)

C. SURGEON GENERAL'S REGULATIONS FOR THE SALE OF LEAD-TREATED FUEL

Almost at the outset of its operations, the Ethyl Corporation became involved in a public health controversy as to the effect upon the public of the patented fuel so serious that the corporation voluntarily discontinued the sale of anti-knock compound from May 5, 1925 to June, 1926. The details of the studies made and conclusions reached are fully set out in the Stipulation (Fols. 75-85, R. 27-34). They may be briefly summarized.

Some cases of lead poisoning occurred in the early manufacture of tetraethyl lead and the concentrated fluid in which it was embodied. These cases were given wide newspaper publicity and the newspapers made no distinction between the public health problem involved in the manufacture of these products and the use of them in motor cars (Stip. Fol. 75, R. 27).

The Ethyl Corporation enlisted the aid of the United States Bureau of Mines and of Columbia University. In addition, through its own medical department (which is still maintained), it undertook extensive research. While these investigations were in process, the public clamor caused the Surgeon General of the United States to call a conference of representatives of labor, authorities on industrial health and hygiene, physiologists, physicians, and representatives of defendant corporation, to investigate the problem. Meanwhile, the corporation, as already noted, voluntarily discontinued its business. By resolution of the conference, a committee of seven authorities in clinical medicine, physiology and industrial hygiene was appointed by the Surgeon Gen-

eral to study and report on the problem, the investigation to be paid for exclusively out of public funds (Stip. Fols. 76-77, R. 28-29).

On January 17, 1926 the Committee reported that there were no grounds for prohibiting the use of treated gasoline in which the content of tetraethyl lead did not exceed three cubic centimeters per gallon, the maximum theretofore used, "*provided that its distribution and use are controlled by proper regulations*" (Fol. 79, R. 30), and suggested that the formulation of the regulations was the duty of the Surgeon General (Stip., Fols. 78-80, R. 30-31). The Committee stated that it recognized that its conclusions were subject to criticism because its study was confined to the effect of the limited use of lead-treated gasoline which had taken place and that the use of such a motor fuel over a long period of time might result in harmful physiological consequences of which there was no present evidence. The Committee therefore recommended that the study of the matter be continued by the Surgeon General (Stip., Fol. 80, R. 30).

The Surgeon General thereupon promulgated regulations with respect to the manufacture of the lead fluid, its blending with gasoline, and its distribution and sale to the motoring public. Of particular interest on this appeal are the regulations limiting the maximum concentration of tetraethyl lead in the patented gasoline, requiring that the treated gasoline be colored so as to deter individuals from using it for cleaning or other similar purposes, that employees be periodically examined, that defendant should maintain a corps of inspectors and service

men, that specified lead warning signs be used at filling stations, and on any retail containers sold to the general public at such stations, and that leaflets be made available and certain precautionary notices posted. (R. 130-42.)

The Ethyl Corporation assured the Surgeon General that it would abide by these regulations and it has consistently done so, also requiring compliance by its licensees (Stip., Fols. 80-81, R. 31; Ex. 9-A, R. 103; Ex. 9-B, R. 111-12; Ex. 13-A, R. 124-25; Ex. 13-B, R. 127-28). To obtain direct control and the right to inspect, to examine employees and equipment, and to ensure compliance, defendant found it necessary to license not only refiners but also jobbers handling its patented fuel.[9] The United States Public Health Service has at all times since the publication of its proposed regulations manifested an active interest in the compliance by defendant corporation and members of the petroleum industry with these regulations.[10] (Stip., Fol. 81, R. 31.)

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[9] It is also interesting to note that the British Ministry of Health conducted a similar investigation and permitted the patented fuel to be used "*so long as the terms of the contract between the proprietors of the fuel and the distributors in this country secure the continued observance of certain precautions*", the precautions being warning signs on cans and pumps, coloring the gasoline, and limiting the maximum concentration of tetraethyl lead (Stip., Fols. 83-84, R. 33-34). This in effect *requires licensing* of jobbers as well as other distributors.

[10] In the court below the Government sought in two ways to minimize this vital problem of public health protection. First, it was suggested that "the health requirements are not those of the Surgeon General but are requirements of the defendant corporation voluntarily adopted by them upon the recommenda-

D. CREATION OF CONSUMER DEMAND, USE OF TRADEMARKS, AND CONTROL OF QUALITY

Finally, even after clearing the hurdle of securing compliance with public health regulations, the defendant corporation had several other important factors to consider in formulating a system to secure a return on its basic patents. We have already discussed the reluctance of manufacturers of automobiles to make a high compression car unless there was an adequate distribution of reasonably priced patented fuel for such engines. In addition to persuading manufacturers to produce lighter engines of high compression, it was also necessary to educate the public on the advantages and economics of the patented fuel to use in such cars so that it in turn would demand high compression engines from the manufacturers. Extensive advertising was required, and to have meaning, that advertising had to relate to the

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tion of that official." Brief, p. 75. Aside from the lack of moral authority in this suggestion, it might be pointed out that a product condemned by the Surgeon General has little commercial chance to survive even if the manufacturer were sufficiently lacking in integrity to seek to market. (Here there was voluntary discontinuance until approval and a splendid example of government-industry cooperation afterwards.) Compliance with the regulations was and still is a prerequisite to securing any return from the patents. Second, the Government, though conceding the necessity for rigid control of mixing operations, suggests that because no cases of poisoning from lead treated fuel were found, *while the retail regulations were in effect*, there is no health hazard with respect to lead-treated fuel. This point will be developed in the Argument, *infra*, pp. 56-58, but the fallacy in the premise should be apparent: Simply because the regulations have operated successfully to forestall injury to the general public is no valid reason for assuming that the precautions required are unimportant.

trademark under which the patented fuel would be distributed to the public. Trademark identification was likewise necessary because the patented fuel would sell at a premium over other gasoline.

Here again commercial realities controlled development. Gasoline is not sold in sealed original containers. When sold by refiners through their own retail outlets, it was and is largely marketed under the refiners' own brands.[11] Frequently, the jobber is in turn licensed to use the refiner's trademark and, occasionally, jobbers have their own trademarks. But throughout the entire commercial movement from refinery to motorist's automobile, gasoline was and is purchased, stored, and delivered in bulk, with opportunity for deterioration and accidental or intentional adulteration or substitution. It was known that the patented lead-treated gasoline deteriorates with prolonged storage. (Stip., Fol. 88, R. 36.)

Consequently, defendant corporation had at the outset two practical problems: To identify its patented product with some common denominator or trademark symbol; and to protect the product sold under that trademark against adulteration and deterioration. For the purpose of developing, by its advertising, good will in lead-treated gasoline apart from the trademarks of refiners and jobbers, the defendant corporation adopted as the symbol of its good will the now familiar word "ETHYL" displayed in a distinctive design as a trademark. This mark was widely advertised and required to be displayed on all retail pumps dispensing the patented

[11] Compare *Federal Trade Comm.* v. *Sinclair Refining Co.*, 261 U. S. 463.

fuel.[12] Along with it was displayed the warning signs required by the Surgeon General's regulations. In time the latter came equally to symbolize the defendant's patented product. (Stip., Fol. 95, R. 41.)

To protect the patented product against adulteration, substitution, and deterioration (as well as to insure the essential compliance with public health regulations) defendant adopted as part of its licensing system the licensing of jobbers. This system of licenses, including the jobber licenses under attack, warrants consideration.

3. LICENSES AND LICENSING PRACTICES

Upon resuming business in 1926 the defendant Ethyl Gasoline Corporation developed its licensing system to exploit its patents against the background we have summarized. It should be noted at the outset that throughout this proceeding the Government has not questioned any license provision in the refiner licenses other than the limitation that sales to jobbers may be made only to licensed jobbers. Nor has it questioned any provision in the jobber licenses. Its sole charge of unlawful conduct relates to practices in issuing or renewing jobber licenses. An understanding of what is charged as unlawful, how-

[12] The trademark design, which includes defendant corporation's name and address, has been registered under federal and all but one of the forty-eight states. (Exh. 25-A-F; R. 188-93), has been both widely advertised by defendant and refiner-licensees, (Stip. Fols. 94-96, R. 41) and has been recognized by the courts. "The amount of money expended by complainant in pictorial and display advertising for universal circulation is tremendous." *Ethyl Gasoline Corp.* v. *Klibanow*, 1 F. Supp 584; see also *Ethyl Gasoline Corp.* v. *Jay-Craver, Inc.*, 4 F. Supp. 264.

ever, requires knowledge of the license provisions and the practices of the defendant corporation.

A. ETHYL LICENSES

Refiners. (Ex. 9-B, R. 109-18.) To utilize existing distributing facilities and at the same time maintain close supervision of hazardous mixing of the components of the patented fuel, the defendant corporation itself manufactured the anti-knock fluid and sold it to refiners whom it licensed. The license specified elaborate safety requirements for the mixing of lead-treated gasoline and its distribution. Equipment and mixing system were prescribed by the licensor.[13] Licensees agreed to abide by the regulations of the Surgeon General or any other governmental agency. They agreed that in reselling they would require pur-

[13] "... the fluid is added to gasoline by means of carefully designed equipment which accomplishes the unloading and mixing operation through a closed system entirely by vacuum for the purpose of decreasing or eliminating possible health hazards due to spillage of tetraethyl lead in concentrated form. The building and machinery constituting the plant by which the fluid is unloaded, handled and mixed by the refiners with gasoline are required by defendant corporation to be built in strict compliance with blueprints submitted to and approved by defendant corporation. A typical plant is illustrated by Exhibits 6-A and 6-B attached hereto. The average cost of such a plant and equipment is around $10,000. Defendant corporation further requires that the process of handling and mixing fluid be carried out in accordance with its printed regulations, a copy of which is attached hereto as Exhibit 6-C [R. 85-100]." (Stip. Fols. 70, R. 24). The elaborate blueprints of the required refinery mixing system were not printed in the record on appeal but are available for examination in the original papers in this Court.

chasers to obligate themselves similarly to comply, and in turn to impose a like obligation for any and all subsequent sales or resales. (Exh. 9-B, R. 112.) The aim was to secure by contracts running to and through all handlers agreements to adhere to these essential health requirements. (Exh. 14-A-D, R. 130-42.) (Unfortunately, as the lower court remarked in its opinion (R. 54), the refiners were not particularly effective in enforcing these obligations and direct supervision and inspection by the Ethyl Corporation had to be developed. (Stip., Fol. 82, R. 32.)) The refiner license further provided for continuous inspection of equipment by the licensor, the making of repairs required by the latter, and the medical examination of employees and treatment prescribed by the licensor's medical department. (Exh. 9-B, R. 112, *cf.* Stip., Fol. 76, R. 28.) In keeping with the Surgeon General's regulation, the maximum amount of tetraethyl lead which may be added is limited to three cubic centimeters per gallon of gasoline. (R. 114.)

Refiners are next subjected to a series of requirements to insure quality. The patented fuel manufactured must be at least "equal in anti-knock value to the standard Ethyl Gasoline" as fixed by defendant corporation. (Exh. 9-B, R. 113.) At the time of the Stipulation this standard was fixed at 76 octane which was very high. (Stip., Fol. 72, R. 25.)[14] The refining licenses also contain detailed specifications as to the gasoline to be used—the distillation residue, sulfur content, gum-producing substances, and cor-

[14] As noted below, this standard has since been raised as competitive anti-knock fuels were developed.

rosion characteristics—and defendant corporation as licensor reserved the right to sample, test, and reject gasoline both before and after admixture with the anti-knock fluid. (R. 112-113.) The refiner also agreed to use its best efforts to insure that all Ethyl gasoline sold directly to consumers or through resellers, would conform to these quality standards.

With respect to trademarks, the refiner agreed to sell the patented fuel only under a name consisting of its own tradename followed by "ETHYL GASOLINE"[15] in a form satisfactory to licensor. Refiners were likewise required to obligate all purchasers for resale (except other refiners and jobbers having their own brand names) to conform to these trademark requirements. (R. 115.) Finally, the refiner agreed to advertise and "push" the sale of the patented fuel under the trademark prescribed. (R. 115.)

Of particular interest in this suit are the limitations in the refiner license. The patented product may be sold to other licensed refiners, to the consuming public, to retail dealers, and to licensed jobbers. But it may not be sold to other licensed refiners unless both the seller and the purchaser guarantee that when resold under the latter's brand name it will conform to the prescribed standards—thus enabling the licensor to fix responsibility for poor quality.[16]

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[15] All licensees but one use this name. The one employed the name "Esso" for the patented fuel, but in this case, as in all others, the defendant corporation's registered trademark had to appear on the retail pump. (Stip., Fol. 93, R. 40.)

[16] The refiner may also sell to other refiners licensed to sell but not to manufacture—thus enabling small refiners unable to afford the expense of equipment and supervision to acquire

The points at which the patented fuel may be manufactured are specified—in order that the licensor may inspect, test, and insure compliance with health requirements. The *price* is not fixed but the patented fuel must be sold *by the refiner* at a fixed premium over the refiner's best non-premium gasoline. There is a specific exclusion of any effort to control or affect the resale price in the hands of jobbers or retailers to whom the refiner sells the product. The Government does not question the license provisions imposing these price differential requirements in sales by refiners and there is no suggestion of any attempt in the refiner license agreement to control resale prices of jobbers or retailers. (R. 110.) Lastly, the refiner license limits sales to jobbers only to jobbers holding a license—which is the single provision under attack.

It should be noted in passing that there is *no agreement* concerning this limitation. The refiner-licensee is simply given no authority to sell to an unlicensed jobber. The refiner does not agree to refrain from doing so. It is a *limitation in* his license. Similarly, the licensor does not agree in any way to impose a like limitation on other refiner-licensees (though in practice it does so) and does not undertake to license or refrain from licensing particular jobbers. The validity of this *condition* in the refiner license is thus dependent—if it may be at all

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the patented lead-treated gasoline for sale under their own Ethyl brands. Sales to consumers are not limited. Sales to retail dealers must be in less than tank car lots—which meant that in directly supplying retail dealers from tank wagons the refiner could check on the use of the required warning signs on the retail pumps.

questioned—upon what is required in the jobber license and upon the practices in issuing, renewing, or revoking such jobber licenses.

Jobbers. (Exh. 13-A, R. 124-26.) None of the provisions of the jobber license itself are assailed as improper. The Government, however, questions their necessity and likewise challenges the right to require any license of a jobber. To summarize the principal provisions of the jobber licenses: The license is issued not only under the patent covering anti-knock fuel but also specifically refers to and is based upon the method or use patent. (The legal effect of this reference will be considered in the Argument, *infra* pp. 54-55.) Most of the jobbers license requirements relate to insuring compliance with the Surgeon General's regulations. Indeed, attached to the face of each jobber license was a summary of the regulations. (R. 124.) The jobber's agreement to comply with the regulations, to permit medical examination of employees by the licensor, to supply lead warning signs to retailers and safety rules for handling by their employees, and to cancel contracts with retailers who fail to follow these safety rules, are obviously necessary. Territorial limitations prevent the sale of odd lots beyond the jobber's normal sales area in which he can determine whether the required lead warning signs are in place and the use of labelled containers carried out. The agreement not to dilute the patented product sold under the "ETHYL" trademark and to require that no purchaser dilute or permit its deterioration are necessary to protect the quality of a premium product. Finally, the require-

ment that the jobber furnish the licensor with a list of all points at which the patented fuel sold by it is sold, is obviously designed to enable th licensor to trace the source of diluted or adulterated gasoline and to check the maintenance of the warning signs, the use of proper containers, the availability of pamphlets, and any alleged cases of lead poisoning, etc.

B. LICENSES FOR "Q" OR SO-CALLED REGULAR GASOLINE.

By the spring of 1933 the use of a motor fuel of high octane rating was a commercial success and a demand arose for using the properties of tetraethyl lead in a wider range of gasoline than the premium priced product then sold under the Ethyl trademark. Accordingly the defendant corporation determined to license the use of the patents in the production of lead-treated fuel of the next best, *i. e.*, non-premium grade. In so doing it naturally followed the licensing system which had successfully for seven years enabled it to secure rigid compliance with the Surgeon General's regulations and to prevent adulteration of the patented fuel in its bulk sales by jobbers. Since the trademark "ETHYL" had come to be associated with highest type premium gasoline on the market, it could not intelligently authorize sale of the next best non-premium fuel under the same name. And since by that time the public through constant advertising and observation of the "lead" sign had become familiar with the properties of tetraethyl lead compound as an anti-knock in the patented fuel, the Ethyl Corporation expanded its advertising to bring home to motorists the availability of both

grades possessing similar, but not equal, anti-knock properties."[17]

For this product it adopted the name "Q" gasoline under which it promoted its use by owners of truck, taxi, bus and like fleets. (Stip., Fol. 94, R. 40-41.) It likewise licensed both refiners and jobbers. In general these licenses followed the original Ethyl licenses.

Refiner's "Q" License. (Exh. 9-A, R. 101-08.) Health requirements, as to equipment, medical su-

[17] In this connection the Stipulation recites: "Exhibit 25-H, attached hereto, comprises copies of advertisements published by defendant corporation in various magazines and newspapers, some of circulation to farmers and in rural districts, and others of urban and general circulation; the advertisements in Exhibit 25-H, which were published as appearing thereon, being representative of many similar advertisements,—similarly referring to the defendant corporation's manufacture of anti-knock fluid and tetraethyl lead, for regular gasoline,—which have been similarly published by defendant corporation in the years 1934, 1935 and 1936 and also since 1936. On occasion, filling station attendants, garage proprietors and workmen, automobile dealers and mechanics, and others having to do with the sale or recommendation of gasoline, have advised members of the gasoline purchasing public that regular gasoline, as dispensed from pumps containing the lead warning sign, is 'just about the same as Ethyl gasoline', or contains the same anti-knock ingredients as Ethyl gasoline, or contains lead 'made by the Ethyl Gasoline people', or is 'like Ethyl gasoline', or contains lead like Ethyl gasoline; or have otherwise passed on to the public, by word of mouth, their knowledge or belief that regular gasoline, dispensed from pumps containing lead warning signs, is related in some manner to Ethyl gasoline or to defendant corporation." (Stip. Fols. 94-95, R. 41.) In the printed record only a few typical advertisements have been reproduced. The wide range of advertising can be seen in the full set in the original papers.

pervision, adherence to the Surgeon General's regulations, maximum amount of tetraethyl lead to be used, etc., were identical with those in the earlier licenses. To maintain the distinction between the Ethyl premium grade and the "Q" or regular grade, the license limited the octane rating of the product to 70. The specifications as to the quality of the component gasoline with respect to residue, sulfur content, corrosive effect, gum, etc., and sampling and testing by licensor were identical (Compare R. 104-05 and R. 113), and it was specified that the gasoline should be the refiner's highest priced motor fuel below the refiner's Ethyl grade. (R. 102.) In practice the octane rating of so-called lead-treated regular gasoline has ranged between 68 and 70 which is conceded to be a high rating. (Stip. Fol. 73, R. 25; Fol. 85, R. 34.) The regular lead-treated motor fuel was required to be dyed or colored to permit identification. Finally, it was specified that jobber sales could be made only to licensed jobbers.

Jobbers "Q" License. (Exh. 13-B, R. 127-29.) Except for the absence of provisions concerning the use of the Ethyl trademark, the jobber license for "Q" or regular gasoline was substantially the same as the jobber license for Ethyl. (See *supra* pp. 26-27.) The Government has, however, throughout the proceeding suggested that the only important health regulation with respect to jobber handling of "Q" or regular gasoline is the required use of lead warning signs on retail pumps and containers, the importance of which is not questioned. Without at this point discussing whether counsel's or the lower court's assumptions as to how compliance with these warning sign requirements can be obtained, we call

attention to what experience and this record show as to safety supervision of the storage by jobbers of lead-treated gasoline.

> ". . . defendant corporation also maintains a *safety department,* which consists of supervising officials and a number of field men who devote their entire time to the safety work of this department. That work includes: . . . *supervision of the cleaning of tanks, including jobbers' storage tanks,* which have been used for storing leaded gasoline, both Ethyl *and regular;* ascertainment and investigation of various possible lead hazards . . ." (Stip., Fol. 82, R. 32.)

There can be no dispute on the record as to the necessity for detailed jobbers license provisions relating to public health[18] and the protection of the patented product against substitution, dilution, or adulteration in the hands of jobbers.[19]

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[18] "A number of instances have been found where jobbers or their retail dealers have been selling treated gasoline, *sometimes Ethyl and sometimes regular,* through pumps which did not carry lead warning signs . . . .; and defendant corporation, particularly through its field representatives, has made it a practise to investigate such instances and to endeavor to prevent the occurrence or recurrence of the same on the part of licensed jobbers or their dealers." (Stip. Fol. 85-86, R. 34-35.)

[19] Similarly, the Government attempts to minimize the jobber license prohibitions against adulteration or dilution of regular gasoline. While dilution of regular is less frequent than dilution of Ethyl, the Stipulation clearly indicates that despite the license provision and constant checking, dilution and adulteration of the patented regular gasoline does occur. (Stip. Fol. 85, R. 34.)

The Government insists that the jobber licenses, when taken together with defendant corporation's practices in licensing jobbers, constitutes an unlawful restraint of trade.

Issuance of Jobber Licenses. It is stipulated that out of a total of 12,000 jobbers in the United States, 11,000 or about 92 per cent *were granted licenses.* (Stip., Fols. 74-75, R. 27.) What about the other 8 per cent? First, there is no information in the record as to how many applied for a license. We are told that several large refiners do not sell the patented Ethyl or in some cases patented regular gasoline, (Stip., Fols. 68-69, R. 22-23) and hence their jobber customers do not need licenses. Secondly, as to the remainder the Stipulation recites

> "*Some* applications for Ethyl jobber licenses and *a few* for regular gasoline jobber licenses have been refused because the volume of business of the jobber was not sufficient, in the opinion of defendant corporation, to move the gasoline with sufficient rapidity to avoid deterioration in storage. *A number* of jobber licenses have been refused because in the opinion of defendant corporation the physical equipment of the jobber lent itself to the actual or accidental mixing of different grades or brands of gasoline or because in the opinion of defendant corporation the retail outlets of the jobber were shabby or disreputable in appearance or location, or because in the opinion of defendant corporation the jobber's reputation in his community was bad, or because in the opinion of defendant corporation the jobber had a record of tax evasion, dilution, substitution; or misbranding. Employees of defendant corporation would testify

that in passing upon applications for jobber licenses they were guided by their respective individual judgments as to what was in the best interests of the corporation in reference to the good will of the corporation with its refining licensees or the public." (Stip., Fols. 88-89, R. 36-37).[20]

Presumably if there is any right to determine to whom a patented and trademarked product may be sold, there is no objection to refusal on these grounds.

As to the remaining jobbers—that is, that portion of the 8 per cent, who were not licensed, remaining after we deduct the unknown number who never applied for licenses and the unknown number described variously as a "few," "some," and a "number," who were refused licenses for obviously proper reasons—the Stipulation adds the further, but unfortunately vague, information:

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[20] It is also elsewhere stipulated: "The defendant corporation has *in some cases* refused a license to a jobber who desired to change his source of supply upon the ground that such jobber was, or was claimed by the refiner-supplier to be, under contract to purchase his Ethyl or regular gasoline from an existing refiner-supplier, and that the request, if granted, would in the opinion of the defendant corporation have breached such contract or claimed contract. *In a few of these cases* the jobber has contended that his contract with the existing refiner-supplier had already been abrogated or for other reasons was not enforceable against him." (Stip. Fols 92-93, R. 39.) When it is noted that only jobbers selling under the *refiner's brand* were required to buy from a particular refiner, and that all others could buy from any licensed refiner they pleased (R. 39), this comes down to saying that the defendant corporation refused "in some cases" to interfere in a controversy between refiner and jobber lest it be charged with inducing a breach of contract. This is hardly the substance of an unlawful restraint of trade under the Sherman Act.

> "The greatest number of jobber applicants who were denied licenses were turned down on the basis of adverse findings of field representatives as to 'business ethics'." (Fol. 88, R. 36.)

Further breaking down this remainder, the Stipulation later recites:

> "Defendants *have refused to issue* licenses to *a number of jobbers* who, investigation showed, were not abiding by the marketing policies prevailing or ostensibly prevailing in the industry or who were not maintaining the retail prices on gasoline posted generally in the industry or whose retail dealers were not maintaining said prices." (Fol. 90, R. 37.)

That the latter grouping of price cutters subdivided the former total groups of those refused because of "business ethics," is shown by the district judge's observation that "although the stipulation of facts defines 'business ethics' as including the 'marketing policies and prevailing prices of the petroleum industry,' it does not state that 'marketing policies' or 'marketing practices' are synonymous with 'price policies.'" (R. 52.) Indeed the record shows that they are not, since, by Trade Practice Conference Rules and the NRA Petroleum Industry Code, many unethical marketing practices and policies—such as stimulation of sales by lotteries, substitution of brands, fictitious rentals of equipment to retailers—had been condemned in the industry.[21]

[21] Exhibits 23-A, 23-B, and 23-C, referred to in Paragraph 23 of the Stipulation (R. 39). These Federal Trade Commission proposed and approved Trade Practice Rules and the NRA Petroleum Industry Code of Fair Competition, being public documents, have been omitted from the printed record, but are readily available in the original papers.

It is further shown by the Stipulation that the "number" of jobbers who had been denied licenses as price cutters did not include all who fell in that class and that refusal of licenses on this ground was not a general policy. For, using precisely the same quantitative expression employed above, the stipulation recites:

> "Defendants *have issued* licenses to *a number of jobbers* who, investigation showed, were not abiding by the prices prevailing or ostensibly prevailing in the industry or who were not maintaining retail prices on gasoline posted generally in the industry or whose retail dealers were not maintaining said prices prevailing or ostensibly prevailing in the industry." (Fol. 90, R. 38.)

In short, the refusals of licenses which bear the brunt of the Government's attack, and the entire criticism of the district court—that is, those based upon price cutting—constitute a mere fraction of a fraction of the unlicensed jobbers, who in their entirety amount to only 8 per cent of all jobbers. These instances were apparently balanced, so far as quantity can be deduced from the stipulation, by licenses granted to other jobbers who had engaged in the same practices.

Alleged Price Maintenance. The Government contended below that the investigations of the licensed jobbers—constituting 92 per cent of all those in the United States—had been used not to protect quality and secure compliance with the Surgeon General's regulations but to secure maintenance of refiners' prices on threat of cancellation.

On this point the stipulation recites:

> "Jobber licenses have not been cancelled because of the failure of a jobber to maintain the policies, practices, and prices of the major oil companies or market leaders." (Stip., Fol. 92, R. 39.)

And also:

> "Defendants have not issued any statement or instructions to the effect that they would cancel licenses for such reason [price cutting], and there has been and is a great deal of cutting of prices below the posted prices on the part of licensed refiners, including major oil companies, and licensed jobbers." (Fol. 89, R. 37.)

Moreover, not only have licenses, as already stated, been issued to jobbers who were cutting prices, but as the district judge stated, and specifically found, "there has been and is a great deal of price cutting on the part of licensed jobbers, yet licenses have not been cancelled for that reason." (R. 51, Finding 14, R. 60.)

The district court refused to find for the Government on its charge of price maintenance. (R. 60.)

4. BUSINESS ACHIEVEMENT AND COMPETITION

Almost 65 per cent of all motor fuel sold in the United States is the combination of hydrocarbons and anti-knock compounds covered by the patent.[22]

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[22] Here again, on the statistics of use, the stipulation is not clear. Refiners who produce 88 per cent of all gasoline have been licensed. But of these, two major producers—Shell and American Oil—do not use the patents on their whole production. Thus

This highly successful commercial development of the patented fuel appears to furnish much of the basis for the Government's contentions. Yet it evidences, not unlawful conduct, but the magnificent contributions made by these inventions to lighter weight and more efficient engines, better automobiles, and greater mileage per gallon of fuel.[23]

These inventions have had a double effect in stimulating the refining industry to dynamic development. First, by creating the high compression engine they have made a tremendous market for fuel of high octane rating. Secondly, they have opened a

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the total potential production of licensed users is some undisclosed amount below 88 per cent. The Stipulation further shows that between 70 per cent and 80 per cent of the gasoline produced by these actual users is under the patents. (Fol. 73, R. 26.) 75 per cent of 88 per cent is 65 per cent which represents the maximum amount of lead-treated gasoline produced without taking into account the fact that two major producers, Shell and American Oil, though licensed, do not treat all of their gasoline under the patents.

[23] "In the past 15 years the number of motor cars has increased from about 9,000,000 in 1920 to more than 26,000,000 as of January 1, 1936; while the motor-fuel consumption increased from 109,000,000 bbl. to more than 432,000,000 bbl. per year. In addition, the average motor compression ratio increased from 4 to 6.2. This is of tremendous significance from an economic standpoint, in that the efficiency of motors has increased more than 30 per cent during this period. Speeds of transportation have more than doubled, primarily due to improved anti-knock value of the gasoline and better design of motors thereby made possible." Egloff, Gustav, *Universal Oil Products Company Bulletin*, 1936, page 197. In the 1940 automobile models the average compression ratio of standard equipment has again increased. See *National Petroleum News*, Nov. 8, 1939, p. 59.

wholly new field for inquiry as to how such a fuel may be produced.

It is stipulated that by developments in the cracking process refiners have discovered how to increase the anti-knock value of gasoline without using these patents. (Stip., Fols. 67-70, R. 21-23.) Since April, 1938, when the Stipulation was signed, new commercial refining methods have led to the sale of unpatented gasoline of octane rating equal to the Ethyl grade of the patented fuel.[24] This in turn has led to an increase in the standard prescribed by the licensor for the patented fuel, the minimum octane rating of Ethyl now being 78. With higher test gasoline available, even lighter and more efficient motorcars can be manufactured.

It is clear from the Stipulation (Fol. 63, R. 23) that the refiners are governed in the use of the pat-

[24] Developments in this two-year period, particularly in the field of catalytic, as distinguished from thermal, oil cracking, have excited the industry. These methods are now in the commercial stage. See "The Houdry Process", *National Petroleum News*, Aug. 23, 1939, pp. R. 346-67; "Process Development Section" of *Refiner & Natural Gasoline Manufacturer*, Sept. 1939, (describing over twenty processes which had come into use in the preceding year). The speed of development is evidenced by reports as to the Houdry process alone showing an increase from 16,600 barrels daily capacity to 180,000 daily capacity in one year. *National Petroleum News*, Nov. 29, 1939, p. R. 501. Dr. Gustav Egloff, one of the outstanding authorities on catalysis in refining, reported the present commercial catalytic production of 76 and 80 octane number fuel, and predicted that these new processes would permit manufacture and sale for ordinary use by motorists of a 100 octane fuel. *National Petroleum News*, Oct. 11, 1939. This was confirmed in the Hearings Before the Temporary National Economic Committee on the Petroleum Industry, Oct. 23, 1939, p. 417.

ents of defendant corporation solely by considerations of economy. If a high octane fuel can be economically made without use of the patented combination, it will inevitably result in diminution of return of the inventions. It may well be that only by keeping the patented fuel at a higher level than other available gasoline (within the limits now or in the future permitted by the Surgeon General's health regulations) and by holding the good will of motorists through its tradename and assured quality, can the defendant corporation secure a return on its patents. (See Argument, *infra* pp. 78-79.)

5. OPINION, FINDINGS AND DECREE BELOW

Opinion. (R. 43.) In its opinion the district court concludes that the provisions in the refiner licenses that the fuel may be sold only to jobbers licensed by Ethyl Corporation are in restraint of trade.

Its reasoning is as follows:

It declines to decide that price maintenance or agreement or understanding to maintain prices has been established.

However, the court says, by the terms of the refiner licenses permitting sales only to licensed jobbers, the Ethyl Company is able to exclude and has excluded some jobbers from the business of selling lead-treated fuel. The principal reason has been unsatisfactory "business ethics." Unless the patents justify these restraints, the court believes that they offend against the anti-trust laws.

The court then turns to the patents. It ignores the method patent and the fuel patent, and limits its consideration to the fluid or anti-knock compound patent. It apparently considers (without discussion)

that this is the only patent under which defendant has any rights. With the scope of the patent monopoly thus narrowed, the opinion discusses whether the jobber licenses are in furtherance of any legitimate interest of the patentee in the exploitation of its invention.

It recognizes a legitimate interest in securing compliance with the public health regulations and in preventing adulteration, dilution, and deterioration of the patented product. *It sanctioned the making of field investigations by defendant.* But it concluded that while

> "not concerned with determining defendants' future policies or practices"

the court was

> "satisfied that the jobber licensing system is not the only method by which observance of the health regulations by jobbers can be enforced." (R. 54.)

Similarly, the court suggested that it was

> "evident that whatever interests the defendant corporation had in preventing dilution, adulteration and deterioration of treated gasoline in the hands of jobbers may be protected without any resort to the jobber license device." (R. 54.)

Nowhere in the opinion is there any suggestion as to how the licensor can conduct investigations, examine tanks and equipment, make medical examinations of employees, or take samples from jobbers whom it is forbidden to license. No consideration is given to the question as to how effective the court's assumed

(and unstated) methods might be in protecting against violation of the health regulations or adulteration or dilution.

The opinion then concludes that since the Ethyl Corporation itself manufactures only the anti-knock fluid it is not interested in the lead-treated fuel produced by its licensees and in its subsequent use. This is the result of ignoring the method and fuel patents and the rights and interests of the patentee in the fuel, its use in internal combustion engines, and in safe distribution to the motorist.

Since the court, therefore, believes that there are other (undefined) methods of protecting patentee's interest in the anti-knock fluid, it concludes that the Ethyl Corporation has no right to exclude anyone from the business of selling the patented lead-treated fuel for use in the patented process. Therefore, it enjoins the requirement of jobber licenses.

Findings. The lower court entered findings of fact incorporating the Stipulation by reference. In addition, it entered fifteen separate presumably ultimate findings consisting in part of statements from its opinion and in part of assumptions made by the court.[25] It is not clear what the purpose or legal effect of these additional findings is supposed to be. No

[25] For example, in Finding 7 the court states that "jobbers are under no temptation to avoid compliance with the regulation . . . concerning lead warning signs." (R. 59.) There is nothing in the record to support this statement except the fact that the defendant charges only seven cents for the signs. (Fol. 96, R. 41). This has nothing to do with insuring that the pumps be drilled and the signs attached and that the patented fuel be put only in the marked pumps, or that only properly labelled containers be used in distributing to the public.

question of credibility of witnesses is involved. They do not purport to be a summary of the evidence in the form of ultimate facts. At best they constitute an index of what the court has selected from among all the facts in the case as the basis for its decree.

Decree. (R. 62-63.) The decree orders the cancellation of the provision in the refiner licenses limiting sales to licensed jobbers. It requires the cancellation of *all* existing jobber licenses. The patentee is enjoined from including in any future refiner license any provision which limits jobber sales to licensed jobbers. Any future license from defendant corporation to jobbers is prohibited, as is any attempt to require that jobbers be licensed in order to buy, sell, or deal in the patented fuel. No matter how necessary for the enforcement of existing or new public health regulations, no matter to what extent dilution, substitution, or adulteration by jobbers impairs the established good will of the lead treated gasoline, and irrespective of any future changes in the gasoline refining or distributing business, no license control over jobbers may be exercised under these patents. Even though it owns unchallenged product patents on the fuel and a method patent on its use, defendant corporation's right to protect its product and control its sale by jobbers is abrogated.

Apparently recognizing the drastic character of the decree and its effect upon defendants, the court, without objection from the Government, granted an application for a stay order pending appeal. (R. 64.)

SPECIFICATION OF ERRORS TO BE URGED

Appellants urge in this Court that the court below erred in holding that the conditions in the refiner licenses restricting sales of the patented lead-treated fuel to licensed jobbers are not normally and reasonably adapted to secure return from the patents (Assignment I, R. 65); in finding that the defendant corporation in administering its jobber licensing system had not confined itself to preserving its trademarks, good will or reputation in the patented lead-treated gasoline, protecting the public from adulteration, or securing compliance with the health regulations of the Surgeon General (Assignment II, R. 65); in finding that the refusal to license price-cutting jobbers bears no relation to these interests in the patented product (Assignment III, R. 65); in finding, on the basis of speculation and unwarranted inference, that the maintenance of warning notices on pumps is the only one of the health regulations applicable to jobbers (Assignment IV, R. 65); in finding, in the same speculative manner, that the use of jobber licenses is not the only effective method to secure compliance with these health regulations (Assignment V, R. 66), and that these interests might be otherwise protected (Assignment VI, R. 66); in concluding that the patentee's interest in the marketing and pricing policies of those selling the patented and trademarked lead-treated gasoline was very remote (Assignment VII, R. 66); in disregarding the unquestioned claims under defendant's four patents and its right to control the manufacture, sale, or use of the patented lead-treated fuel and the patented method of using it in internal

combustion engines, as well as its trademark rights (Assignments XVIII-XX, R. 68); in failing to distinguish between the patents on the fluid and on the lead-treated gasoline (Assignment IX, R. 66); in concluding that the jobber licensing system was the legal equivalent of a combination among refiners to exclude price cutters (Assignment X, R. 66); in holding that the requirement limiting sales to licensed jobbers was an agreement in unreasonable restraint of commerce (Assignment XI, R. 67); in decreeing that these provisions in refiner license agreements and all jobber licenses be enjoined and prohibited (Assignments XII-XVII, R. 67); and in issuing a drastic injunction on the basis of unwarranted assumptions from the stipulated facts (Assignment XXI, R. 68).

SUMMARY OF ARGUMENT

I

The defendant corporation clearly has the right under its product and method patents to license jobbers handling its patented fuel. A patentee may impose any conditions upon the sale of the patented product by its licensees which are reasonably necessary for its commercial development and for securing financial return from the patent. Where, as in this case, the public interest and that of the patentee combine to require the early, economical, and widespread use of the invention through the licensing of others to manufacture, any reasonable conditions imposed by the licensor to ensure the quality of the patented product made by his licensees, to achieve its ready identification and acceptance by

the public, and to prevent its use in a dangerous manner, are proper. Reasonableness is determined not by hindsight but by the facts confronting the patentee in the beginning.

Measured by these criteria, the securing of compliance with the Surgeon General's health regulations was a *sine qua non* to marketing the patented product. And protection of quality—through trademark identification and prevention of adulteration, dilution, or deterioration of the specified standard—was essential to securing wide public acceptance. There appears to be no dispute that defendant may lawfully restrict its refiner-licensees to selling only to jobbers who comply with precisely the same conditions specified in the separate jobber licenses. The only question is whether there is illegality in defendant, through licensing jobbers, doing directly what it can admittedly do indirectly.

Under its method patent defendant has an unquestionable right to license jobbers. It has a like right under its product patent as well. The conditions in the jobber licenses are reasonable and related to securing return from these patents. Their use may be questioned only as to whether they were necessary or whether they were abused. By any realistic appraisal of the commercial situation they were clearly necessary. And the record does not support the charge that through threat of cancellation they were used to secure maintenance of refiners' prices. Hence there can be no question that defendant had the right to license jobbers, that its jobber licenses are proper and essential to the commercial development of its patents, and that such licenses have not, in extension of their specific conditions, been used unlawfully.

II

The only remaining question is whether the defendant's refusal in a few cases to license price-cutting jobbers to handle the patented product was unlawful. These few refusals are not shown to have had any actual effect upon trade——they did not result in price maintenance, in lessening the number of jobbers, or in any effect upon any jobber, community, or the public. The justification of the refusal to enter into dealings with established price cutters is found in the patentee's interest in preventing the patented product being dealt in by those who will impair its good will and who are more likely to dilute, adulterate, or substitute. Even on unpatented articles this justification has been judicially sanctioned, and the public interest in permitting a manufacturer by express contract to protect himself against price cutters has come to be widely recognized by federal and state enactment. The interest of a non-manufacturing patentee is as great. The circumstances surrounding the development of these patents, particularly in the light of the history of the petroleum industry, make clear the reasonableness of defendant's action. Since its justification in refusing to permit its product to be handled by a few notorious price cutters was reasonable, its occasional refusals of a license for this reason were not an unlawful restraint of trade.

III

Finally, even if defendant's refusal to license a few jobbers were unjustified, the decree entered was improper and an abuse of discretion. The lower

court recognized defendant's legitimate interest in insuring compliance with the Surgeon General's health regulations and in protecting the trademark, good will, and reputation of the patented product. The only practice it found unlawful was the exclusion of price cutters. Abolishing the whole system of jobber licenses was not necessary to enjoin this practice since an adequate, self-policing decree could have readily been entered. The scope of the decree thus exceeded the proof of any unlawful activity. Moreover, its drastic provisions will foreclose the protection of defendant's admittedly legitimate and essential interests. The district court's conclusion that jobber licenses were not necessary is based on assumptions unwarranted and contradicted by the record. There is no support for its view that mere reporting of violation to refiner licensees will be effective. Nor is there any evidence as to what other methods are possible to prevent dilution, adulteration, or substitution, or to insure compliance with health regulations. The decree, therefore, drastically impairs defendant's present ability safely and efficiently to market its patented product. More than this, it seriously hampers the development of the patents and limits the return from them during their remaining life. For it is now clear that in the immediate future the importance of quality controls and public health safeguards will be far greater. As it stands, even upon the view taken by the lower court that jobbers may not be refused licenses because of a prior history of price cutting, the decree is a cumbersome, drastic, and unjustifiable solution.

ARGUMENT

I.

THE DEFENDANT CORPORATION HAS THE RIGHT UNDER ITS PRODUCT AND METHOD PATENTS TO LICENSE JOBBERS HANDLING ITS PATENTED FUEL.

The defendant corporation owns four patents, whose validity and scope is not questioned, covering both the *product*, lead-treated fuel, and the *method* of using it in an internal combustion engine. *Supra* pp. 7-12. (While two of its patents also cover the tetraethyl lead-halide fluid, these claims are not here important.) Defendant thus has whatever rights the statutory patent monopoly confers to exclude all others from making, vending, or using the patented fuel or employing it in an automobile.

A. A PATENTEE MAY IMPOSE ANY CONDITIONS UPON THE SALE OF THE PATENTED PRODUCT BY ITS LICENSEES WHICH ARE REASONABLY NECESSARY FOR ITS COMMERCIAL DEVELOPMENT AND FOR SECURING FINANCIAL RETURN FROM THE PATENT

It may be taken as settled that a patentee's right to exclude all others does not mean, as a logical corollary, that he may permit the manufacture, sale, or use of his invention upon *any* terms and conditions he desires to impose. Though this is the English view,[26] and was at one time to some extent the

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[26] *Incandescent Gas Co.* v. *Cantelo*, 12 Rep. Pat. Cas. 262, 264, Wills, J.: "Inasmuch as he has the right to prevent people from using them [the patented articles], or dealing in them at all, he has the right to do the lesser thing, that is to say, to impose his own conditions. It does not matter how unreasonable or absurd the conditions are." See, also, *National Phonograph*

rule in this Court, *Henry* v. *A. B. Dick Co.*, 224 U. S. 1 (resale price), it has since been repeatedly rejected. *Bauer* v. *O'Donnell*, 229 U. S. 1 (resale price) *Standard Sanitary Mfg. Co.* v. *United States*, 226 U. S. 20 (monopolistic pooling); *Virtue* v. *Creamery Package Mfg. Co.*, 227 U. S. 8; *Motion Picture Patents Co.* v. *Universal Film Mfg Co.*, 243 U. S. 502 (tying clauses) *Carbice Corporation* v. *American Patents Corp.*, 283 U. S. 27, 31 (license conditioned on use of unpatented materials) *Leitch Mfg. Co.* v. *Barber Co.*, 302 U. S. 458 (id.).

Nevertheless, the denial of logical symmetry has not prevented recognition by the Court of the commercial realities encountered in making an invention available to the public and affording to the patent owner a full pecuniary reward. Restrictions in a license to manufacture in only a certain place, *Rubber Co.* v. *Goodyear*, 9 Wall. 788, 799, or a particular type of product, *Bement* v. *National Harrow Co.*, 186 U. S. 70, or a specified quantity, *Aspinwall Mfg. Co.* v. *Gill*, 32 Fed. 697, were early recognized. Similarly, the patent monopoly of use was held to permit licenses limited as to time, *Mitchell* v. *Hawley*, 16 Wall. 544, or place, *Rubber Co.* v. *Goodyear supra*. And a license of the right to sell has been held proper when restricted as to sales price, the persons to whom, and conditions under which, sales

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Co. v. *Menck*, [1911] A. C. 336 (Australian Patents Act). The prohibition of tying clauses in England was provided by statute. Sec. s. 38(1); Patent and Designs Act of Aug. 28, 1907, 7 Edw. 7. c. 29; *Sarason* v. *Frénay*, [1914] 2 Ch. 474; *Huntoon Co.* v. *Kolynos, Inc.*, [1930] 1 Ch. 528. *Cf.* Holmes, J., in *Motion Picture Patents Co.* v. *Universal Film Mfg. Co.*, 243 U. S. 502, 519.

may be made, or the purposes for which the patented article may be sold. *United States* v. *General Electric Co.*, 272 U. S. 476, 490; *General Talking Pictures Corp.* v. *Western Electric Co.*, 304 U. S. 175, 305 U. S. 124; *Straight Side Basket Corp.* v. *Webster Basket Co.*, 4 F. Supp. 644, 10 F. Supp. 171, 82 F. (2d) 245 (C. C. A. 2d); *Vulcan Mfg. Co.* v. *Maytag Co.*, 73 F. (2d) 136 (C. C. A. 8th), *cert. dis.*, 294 U. S. 734.

In this empirical process of judicial inclusion and exclusion, seeking to reconcile the congressional direction that the patentee be given a monopoly with the statutory expression of the public policy against monopolies and unreasonable restraint of trade, *Standard Oil Co.* v. *United States*, 283 U. S. 163, 169-70; *Chicago Board of Trade* v. *United States*, 246 U. S. 231, no precise all-inclusive boundaries have been established. Yet for most practical purposes the penumbra of impropriety is marked out by the cross-lights of previous decisions and opinions.

We submit the following as an *ad hoc* rationale: The owner of a patent is privileged to exclude all others from the manufacture, sale, or use of a patented product, and from use of, or grant of the right to use, a patented process. He may, if it is in his interest to do so, license others to make or sell or use the patented product or process upon payment of a substantial royalty. Either of these methods—retention by the patentee or license on substantial royalty—may serve to secure to him the full pecuniary reward from his invention. In many cases, however, the interest of the patent owner and the public interest alike dictate the earliest and widest

possible use of the product or process. To secure a wide and immediate market it is often necessary for the patentee to develop general use by consumers who want an assured source of supply, *i. e.* the manufacture and sale by many licensees, and who cannot be induced widely to adopt a product that is priced too high, *i. e.*, which carries the cost of a substantial royalty. Thus the patentee cannot as a practical business matter keep his invention for his own exclusive manufacture and sale nor can he exact large royalties for its use and sale by a small group of licensees.[27]

Where the public interest in the widespread use of an invention thus coincides with the interest of the patentee in maximum use and sale of the patented product, he may utilize a number of methods for securing a full financial return. He may, and frequently does, engage both in manufacturing himself and also licensing others to manufacture at a nominal royalty, taking his reward from profits on his own sales and at the same time encouraging, through attractive profit margins, the licensed manufacture and sale by others. Where this is done, the patentee may, to protect the return from his own sales and to prevent cut-throat competition by his own licensees, require the licensees to sell only at prices and through sales methods specified by the

[27] Likewise, the degree to which infringement is invited or the development of other inventions or substitutes for the patented product or process encouraged, is usually determined by the combined effect of (1) the extent to which the invention basically improves the art, (2) the extent to which it is made available for general use or restricted, and (3) the price or royalty, however included, which is charged for such use.

licensor. Under these circumstances, such conditions in a license "are normally and reasonably adapted to secure pecuniary reward for the patentee's monopoly." *United States* v. *General Electric Co.*, 272 U. S. 476, 490."[28] See also *Bement* v. *National Harrow Co.*, 186 U. S. 70.

Where, however, the business facts make it clear that more effective and economical public use of the invention can be secured, the patentee may elect not himself to manufacture the patented product, but instead widely licenses others to do so at a low enough cost—compared with the economies from using the discovery—to enlist their interest and that of the public. His expectation is that by securing wide public acceptance and use during the life of the patent, his small unit return may aggregate a greater reward than retention for his own use or limitation by large royalties. From the point of view of public interest and the manifest purposes of the patent statutes, this method of exploiting an invention is certainly no less desirable. And any conditions imposed by the licensor to control and ensure the quality of the patented product made by his licensees, to achieve its ready identification and acceptance by the public, and, where necessary, to prevent its use in a dangerous manner, are likewise proper.

Finally, the determination as to what conditions are reasonably incident to the commercial develop-

[28] Taft, C. J.: "It would seem entirely reasonable that he should say to the licensee, 'Yes, you may make and sell articles under my patent, but not so as to destroy the profit that I wish to obtain by making them and selling them myself.' "

ment of patents and to securing return from their early and wide-spread use, cannot be made without reference to the character of the invention, the existing conditions in the industry in which it will find use, and the difficulties and possible hazards which its introduction may encounter. *Supra,* pp. 7-21. As in many other situations, the facts of each case are largely controlling. And judicial review cannot substitute oracular hindsight for reasonable business judgment on the facts which existed in the beginning.

Measured by these criteria, there can be no contention that the interests sought to be protected by defendant corporation were not essential to the commercial development of its patents on lead-treated fuel and on the use of such fuel. We have already summarized the facts. *Supra* pp. 7-38. Rigid compliance with the health regulations of the Surgeon General was necessarily a *sine qua non* to marketing the patented product and licensing its use. Protection of quality—through trademark identification and prevention of adulteration, dilution, or deterioration of the specified standard—was essential in securing wide public acceptance of a product for which superior virtues could be claimed and a slightly higher price asked.[29]

It cannot be questioned that defendant corporation might have restricted its refiner-licensees to sel-

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[29] Similarly, the requirement that a price *differential* be maintained *by the refiner* between the patented fuel and other gasolines was necessary in order to retain a profit interest in its manufacture and distribution despite the added cost of lead treatment. The Government has made no objection to these provisions for price differentials.

ling only through their own retail outlets or only to jobbers who owned their own retail outlets since these more restrictive licenses would have afforded closer protection of its interests in maintenance of quality and compliance with the health regulations. Indeed it conceivably might have wholly refused to authorize *any sales* of the patented fuel *to jobbers* just as it has without challenge excluded in these licenses any sales for aviation use. Defendant corporation elected instead to authorize the widest sale and to protect through jobber licenses what the court below termed its "legitimate interests" in the patented product and patented method.

Insofar as restrictive conditions might be included in the refiner licenses, there appears to be no dispute that defendant could restrict the refiner-licensees to selling *only* to jobbers who comply with *precisely the same conditions specified in the separate jobber licenses.*[39]

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[39] We understand this to be the Government's position in the court below. In its brief it suggested that the provisions in the refiner license requiring a refiner to cancel contracts with jobbers who failed to comply with the health regulations, were both effective and proper (Brief, pp. 80, 82); and that it had no objection to a similar requirement that refiners refuse to deliver to any jobber who adulterated, diluted, or permitted the patented product to deteriorate, (p. 83). The only possible doubt was expressed as to the propriety of restricting sales of the Ethyl fuel to those who would use the Ethyl trademark. In the light of the facts concerning the need for consumer identification of a high octane fuel, (*supra* pp. 19-21), there can be no question that this condition was reasonably related to the commercial development of the product patent and hence proper in the refiner license.

The remaining question is whether there is any illegality in its determination to accomplish directly what it could admittedly do indirectly, that is, whether on the facts of this case it has any legal right under its patent monopoly independently to license jobbers and whether the conditions imposed in such licenses were likewise reasonably incident to the commercial development of its patents and to securing a full return from them.

B. THE LICENSING OF JOBBERS IS PROPER AND THE CONDITIONS IMPOSED IN SUCH LICENSES ARE NECESSARY AND REASONABLE

An examination of defendant corporation's patent position clearly discloses the technical basis for its right to license jobbers as well as refiners. (Whether in exercising its collective patent rights under the four patents, it has substantially restrained trade in the patented fuel, and the extent to which, if at all, injunctive remedy is warranted, is considered below, Points II and III.) Under its method patent it was necessary for defendant to authorized the use of the lead-treated fuel upon which it also has a separate product patent.[31] Hence the refiner licenses specifically refer to this method patent, No. 1,787,419, (R. 101, 109), and thus license the

[31] Despite continued attempts by the Government to have them appear controlling, the cases in which the patentee attempts to use a product patent to obtain a monopoly over unpatented materials, have no relevance in the present proceeding. Unlike *Carbice Corp.* v. *American Patents Corp.*, 283 U. S. 27, defendant not only has a patent on the product, lead-treated fuel, but also on one of the component elements, the tetraethyl lead-halide fluid. This is just as though the patentee in the *Carbice* case also

refiner in selling the lead-treated fuel to authorize the use of such fuel under the method patent. But insofar as the refiner license is limited and does not authorize sales to unlicensed jobbers, it cannot serve as a conduit for authority to utilize the method patent. Defendant corporation was wholly within its rights in requiring that *in the case of jobbers* the essential license under the method patent must flow *directly from it to the jobber.* Accordingly, the separate jobber licenses are specifically based on the method patent as well as the product patent. (R. 125, 128.) Thus in requiring that its refiner-licensees sell only to licensed jobbers, and in turn licensing such jobbers, defendant was acting wholly within the technical limits of the rights conferred by its ownership of the method patent.

But the legal justification for the jobber licenses need not rest alone on the narrow, although sufficient, basis of the method patent. They are completely warranted under the product patent as well in view of the practical commercial experience with the lead-treated fuel. We have already examined the necessity for securing compliance with the health regulations and for preventing adulteration, dilution, and deterioration of the patented product. It has also been demonstrated that every condition in

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owned a patent on the carbon dioxide "dry ice." The fact that he did not was the point on which the case turned. 283 U. S. at 29. Similarly, unlike *Leitch Mfg. Co.* v. *Barber Co.*, 302 U. S. 458, the defendant not only has a patent on the method of using lead-treated fuel in an internal combustion engine, but also on the fuel itself. This is just as though the Barber Company in that case owned a patent on the bituminous emulsion. The fact that it did not underlies the decision. 302 U. S. at 460.

the jobber licenses can legally be included as *sales conditions in the refiner license.* And where it is necessary to protect the public health and the quality and reputation of the patented product, we submit that there is nothing in the anti-trust laws as a whole to prohibit the patentee from doing directly no more than he may reasonably do indirectly.

This contention brings us to what we understand is not a difference with the Government on the law, but to some disagreement on the facts in this case with respect to two questions: First, was it reasonably necessary as a business matter to act directly by licensing jobbers rather than indirectly through conditions in refiner licenses? Second, did defendant corporation do *more* through jobber licenses than it could have done indirectly through refiner licenses, that is, did it use the jobber licensing system to secure adherence to refiners' marketing and pricing policies?

I. THE REFINER LICENSES WERE NECESSARY

The record facts clearly indicate that direct licensing of jobbers was necessary and reasonable. There are 123 refiner-licensees. (R. 26.) There are approximately 11,000 jobbers who were licensed (R. 27). All refiners sell gasoline other than the premium Ethyl gasoline and all sell considerable quantities of gasoline which is not subject to the patents in any way. (R. 21-23, 26.) This Court is not unfamiliar with the lengths to which refiners are competitively required to go in the struggle for gallonage volume. Compare *Federal Trade Commission* v. *Sinclair Refining Co.*, 261 U. S. 463. To suppose that refiners would readily cancel contracts with

jobbers failing rigidly to comply with the regulations or neglecting to ensure compliance by their retailers, or that the refiners would refuse to make deliveries to jobbers who permitted or committed adulteration or dilution of the patented product, is to fly in the face of realities. To assume that refiners would devote much attention to policing the activities of the smaller and remote jobbers with respect to these requirements would be expecting the impossible.[32] The lower court specifically recognized that investigations as to compliance, sampling, etc. by defendant corporation would necessarily have to be continued, but assumed that simply telling the refiners of infractions would be sufficient. (R. 54). Necessarily, even though defendant included protective conditions in its refiner licenses, it found itself (and would under the decree find itself) in the commercially impracticable position of being required to revoke the license of a refiner supplying a large number of jobbers because the particular refiner either would not or could not compel compliance with the regulations and quality protection prohibitions by a single jobber. The Government leans heavily on the stipulated facts (R. 34-35) that instances of dilution and adulteration have not been great and that likewise failure of jobbers or their

[32] There are now over 16,300 licensed jobbers. See Petroleum Industry Hearings Before the Temporary National Economic Committee, Oct. 24, 1939, p. 448. The struggle among refiners to keep their jobber customers—as indicating the unlikelihood of depending upon refiner enforcement of health requirements and prevention of dilution—can also be seen in these hearings *Id.*, Oct. 9, 1939, p. 29, *passim*.

retailers to carry lead-warning signs or to prevent deterioration has not been excessive.[33] This tribute to efficiency of the jobber licensing system in accomplishing its purposes is, however, no basis for assuming that without it the story would have been or will in the future be the same.

Moreover, insofar as the patented product was sold under the "ETHYL" trade-mark, the interest of the Ethyl Corporation in insuring that it would not be adulterated or diluted in its commercial transit to the ultimate consumer was essential. The patented product characterized that name as much as the name denoted the product. Compare *The Coca-Cola Co.* v. *The Koke Co.* 254 U. S. 143, 146. It has already been pointed out that lead-treated gasoline of high octane value does not leave the refinery in sealed containers; and the quality of the gasoline reaching the filling station pumps from a jobber is dependent upon the integrity of the jobber and his care in handling the product in bulk. A particular jobber may have in storage at the same time the patented lead-treated gasoline, third-grade gasoline, kerosene, and fuel oil. His piping arrangements may be such as to facilitate, accidentally or intentionally, the mixture of these commodities and the resulting adulteration.

[33] As already noted, *supra* p. 18, note 10, the Government employs the same reasoning in assuming that because enforcement of the health regulations has prevented cases of lead poisoning, these regulations may now be minimized. In like fashion, it —and the lower court (R. 54)—assume that because defendant supplies lead-warning signs for seven cents each, there is no necessity for insuring that they are displayed on the right pumps at the right time or that properly labelled containers will be used.

or dilution of the Ethyl gasoline. (*Supra* p. 20) Under these conditions, where the only method of guaranteeing the integrity of the trademarked patented product is through direct supervision, the use of a jobber license for the purpose of protecting quality is obviously reasonable.[34] Indeed, wholly apart from patents, the existence of commercial conditions paralleling those of the present case, has been held to permit licensing based upon a trademark alone. *Coca-Cola Co.* v. *Bennett*, 238 Fed. 513 (C. C. A. 8th); see also *Coca-Cola Co.* v. *Butler & Sons*, 229 Fed. 224.[35]

Granting that the conditions in these jobber licenses were reasonable (and we do not understand the Government to object to them), it was and is the business judgment of defendant that direct licensing of jobbers is the only effective means of se-

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[34] "Of what benefit would a trade-mark be, if one buying the article protected by it were permitted to adulterate it, or given an opportunity to do so, and then offer it to the public as the genuine article, protected by the trade-mark?" *Coca-Cola Co.* v. *Butler & Sons*, 229 Fed. 224, 232. See, also, *Standard Oil Co.* v. *Fed. Trade Comm.*, 273 Fed. 478, 482 (C.C.A. 2d), *affirmed*, 261 U. S. 463, where the Court of Appeals said "* * * the facts of that [the *Bennett*] case are suggestive of the advantages to the public in being reasonably able to rely upon getting the 'gas' he pays for out of any trade-marked pump."

[35] The fact that the defendant corporation does not directly manufacture the patented fuel is immaterial. Its proprietary interest arises from its specification of the quality of the patented fuel and the attachment to that product of its name and trademark. *Menendez* v. *Holt*, 128 U. S. 514, 520; *Coca-Cola Co.* v. *Bennett*, 238 Fed. 513 (C.C.A. 8th); *Ralston Purina Co.* v. *Samiwax Paper Co.*, 26 F. (2d) 941, 943, 944. *Cf. Yale Electric Corp.* v. *Robertson*, 26 F. (2d) 972, 974 (C.C.A. 2d).

curing their enforcement. Technically under the patent law, it has the right to require jobber licenses under its method patent. Under its product patent on the lead-treated fuel the jobber licenses are also proper if necessary. Even assuming that the court may at all question their necessity, we submit it is an unwarranted judicial encroachment for the court to throw out the patentee's judgment and experience and substitute its own. Complete abrogation of the right to license jobbers under any conditions, substantially impairs the effective use of the invention insofar as jobber distribution is concerned.

2. DEFENDANT CORPORATION DID NOT USE THE JOBBER LICENSING SYSTEM TO REQUIRE ADHERENCE TO REFINERS' MARKETING AND PRICING POLICIES

We come then to the question whether defendant sought to do more by directly licensing jobbers than it might have lawfully accomplished indirectly (and ineffectively) by the same conditions in its refiner licenses. In its petition (R. 6) and in the court below the Government insisted that even though proper on their face, the jobber licenses had been used to require, on threat of cancellation, that jobbers adhere to refiners' marketing and pricing policies. We have already summarized the record facts showing that once a jobber license was granted, it was never canceled for any reason outside the conditions contained in it; that there had in fact been no adherence to any refiner prices; that defendant made no announcements to its jobber licensees with respect to prices; and that jobber-licenses had not in any case been canceled where jobbers cut prices or did not

follow the marketing policies of refiners. (*Supra*, pp. 34-35.)

On these facts the court below refused to find that any case had been made out on the charge that the jobber licenses were, *dehors* the licenses themselves, used for an improper purpose. The decision on this issue can hardly be questioned in the light of the record facts.

We do not contend that defendant may employ its jobber licenses for any purpose foreign to their express conditions, or that it may through threat of cancellation require that the licensees adhere to a refiner's general marketing or pricing policies. This was not done in the present case. And the mere assumption that it *might* be done is, we submit, no basis for an injunction's completely abrogating all jobber licenses which defendant under its patents is legally entitled to issue and the conditions in which are reasonably necessary for the full and safe development of the inventions covered by the patents.

II

Such refusals of licenses to jobbers as occurred were not unlawful

The view of the trial court appears to have been, in its essence, that any system of jobber licenses was an unreasonable restraint of trade because the exclusion of anyone from the business of distributing the patented fuel to be used in the patented process was not necessary to secure defendants' legitimate interests. We have pointed out that this was error, and arose largely from the court's mistake in overlooking or disregarding the fuel patent and the process or

method patent. These grants, and the commercial and health requirements for their proper exploitation, made a system of jobber licenses reasonable, proper, and clearly necessary.

So the patentee, having the right to license jobbers, necessarily had the right to exclude some persons who in its judgment could not meet certain obviously pertinent requirements. Plainly a jobber who announced that he intended to disregard the Surgeon General's regulation or to dilute and palm off an inferior product as lead-treated fuel could be refused a license. Similarly, jobbers whose volume of sales was so small or equipment so defective as to make certain deterioration of the patented fuel in storage, those who had disreputable stations, or who were known in the community as dishonest could be refused licenses on grounds of plain commercial common sense. These rejections raise no serious legal questions.

There remain the small residue who were refused licenses because of their prior activities as price cutters—not of defendant's patented fuel, because they have never sold any, but of other motor fuels. Was it an unreasonable restraint of trade for the Ethyl Corporation to refuse licenses to this group and by so doing exclude them from the business of distributing the patented fuel? Unreasonableness may be determined from its effect upon trade or from the justifiableness of the act—the balancing of the interests which are secured and impaired by it—in much the same way that unfairness or an unfair method of competition is judged. See *Chicago Board of Trade* v. *United States*, 246 U. S. 231, 238; *Maple*

Flooring Mfrs. Assn. v. *United States*, 268 U. S. 563, 578-84.

Viewed from their actual effect upon trade, these refusals cannot be said to be unreasonable. For the record is altogether barren of any showing of harmful effect or tendency in that direction. There is no evidence of the number of refusals except that they must have been small. They were a fraction of a fraction of 8% of all the jobbers. They did not result in a maintenance of prices, because, as the district court says and found, "there has been and is a great deal of price cutting on the part of licensed jobbers" (R. 51, 60), and there is no evidence at all as to what the refiners' prices are or have been. Nor is it shown that any one of the few excluded jobbers did not obtain adequate supplies of unpatented gasoline, even of high octane rating. In short, there is no showing or attempt to show that any jobber, community, or the public at large was affected in any way by these refusals to issue licenses. So unreasonableness of the restraint cannot arise from any effect upon commerce or alleged lessening of competition. *Cement Mfrs. Protective Ass'n* v. *United States*, 268 U. S. 588, 605; *Standard Oil Co.* v. *United States*, 283 U. S. 163, 179.

We turn then to test reasonableness by consideration of the justification of the refusal to deal on the ground of prior price conduct of the applicant. There can be no question that had defendant itself manufactured and sold the patented fuel it would be entirely justified as a seller—wholly apart from any patent rights—in refusing to sell to a jobber whose prior conduct as a price cutter warranted the belief

that he would do the same with defendant's product. *United States* v. *Colgate & Co.*, 250 U. S. 300. The justification is the seller's interest in disposing of his product according to his own judgment of his own advantage, and he may refuse to enter into dealing with anyone who he thinks will act "unfairly in trying to undermine his trade." *United States* v. *Colgate, supra*, at 307, citing *Eastern States Retail Lumber Dealers Association* v. *United States*, 234 U. S. 600, 614.[36] There is to be sure a restraint of trade, but

[36] It is true that prior to the recent amendment to the Sherman Act, see Appendix, any express contract between a seller and his *existing customers* was illegal. *Dr. Miles Medical Co.* v. *Park*, 220 U. S. 373; *Bauer* v. *O'Donnell*, 229 U. S. 1; *United States* v. *Schrader's Son*, 252 U. S. 85; *Boston Store* v. *American Graphophone Co.*, 246 U. S. 8. There is no such charge in the present case. And in view of the lower court's refusal to find any actual price maintenance, or any kind of implied agreement between defendant and any refiner or jobber licensee, there is no need to examine those cases—probably no longer controlling—which deal with the niceties of how far a seller may go in espionage among his existing customers before an implied agreement will be charged. See, *e.g.* *Frey & Son* v. *Cudahy Packing Co.*, 256 U. S. 208; *Federal Trade Commission* v. *Beech-Nut Co.*, 257 U. S. 441; *American Tobacco Co.* v. *Federal Trade Commission*, 9 F. (2d) 570 (C.C.A. 2d), *affirmed* 274 U. S. 543; *Cream of Wheat Co.* v. *Federal Trade Commission*, 14 F. (2d) 40 (C.C.A. 8th). Compare *Hills Bros.* v. *Federal Trade Commission*, 9 F. (2d) 481 (C.C.A. 9th); *Toledo Pipe-Threading Co.* v. *Federal Trade Commission*, 11 F. (2d) 337 (C.C.A. 2nd); *Q. R. S. Music Co.* v. *Federal Trade Commission*, 12 F. (2d) 730 (C.C.A. 7th); *Ayer* v. *Federal Trade Commission*, 15 F. (2d) 274 (C.C.A. 2d), *cert. den.* 273 U. S. 759; *J. W. Kobi Co.* v. *Federal Trade Commission*, 23 F. (2d) 41 (C.C.A. 2d); *Shakespeare Co.* v. *Federal Trade Commission*, 50 F. (2d) 758 (C.C.A. 6th); *Armand Co.* v. *Federal Trade Commission*, 78 F. (2d) 707 (C.C.A. 2d).

it is a justifiable and reasonable restraint. There is no overriding social interest in the price cutter's desire to profit at the seller's expense and undermine his trade. Compare *Federal Trade Commission* v. *Raymond Co.*, 263 U. S. 565, 573; *American Tobacco Co.* v. *Federal Trade Commission*, 9 F. (2d) 570 (C. C. A. 2d), *aff'd.*, 274 U. S. 543.

In the present case the patentee, for commercial reasons, which are clearly in the public interest, has delegated the manufacturing of the patented fuel to a large number of refiner-licensees. But it has reserved from the authority granted in these licenses (among other eminently reasonable powers) the power to exercise its own independent discretion in excluding from those who may buy and resell for use in the patented process, any jobber whose prior business conduct warrants the belief that he will act unfairly by price cutting to undermine patentee's trade. And in a few cases it has exercised this power.

In so doing the Ethyl Corporation was not attempting to extend any powers conferred by the patents which it held. For these patents clearly conferred on it the power to specify to whom its licensee might sell, and, under the process patent, who might authorize the use of the fuel in internal combustion engines. The question is not, therefore, whether Ethyl was, by the jobber licensing system, extending the powers granted by the patents, but whether the Sherman law requires that those powers be narrowed so that, while licenses might properly be refused for some reasons, they could not lawfully be refused because the applicant's prior conduct showed that he would cut prices and injure the patentee's business.

Clearly no such result is required. The patentee, who starts in this case with infinitely greater powers over the marketing and use of its fuel than were possessed by the defendant in the *Colgate* case and who has quite as much interest in the market for the patented fuel, may reserve to itself the power, admittedly possessed by the Colgate Company, to refuse to have the patented product sold by price cutters who will undermine the market. The interest is the same, the injury is the same, the justification for the refusal to deal is the same. The restraint is reasonable and justifiable by reason of defendant's direct interest in and admittedly legal power over the sale and use of its patented fuel. Compare *Wm. Filene's Sons Co.* v. *Fashion Originators' Guild*, 90 F. (2d) 556 (C. C. A. 1st) (boycott of style copyists held justifiable).

The propriety of a seller's interest in protecting the good will in his product by precluding its sale by those who may use it as a price football [37] has come to be widely recognized. In forty-two states so-called Fair Trade Acts have been enacted to sanction explicit resale price contracts. See *Old Dearborn Distributing Co.* v. *Seagram-Distillers Corp.*, 299 U. S. 183. The changing public policy as to the

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[37] See Holmes, J., in *Dr. Miles Medical Co.* v. *Park*, 220 U. S. 373, 412: "I cannot believe that in the long run the public will profit by this court permitting knaves to cut reasonable prices for some ulterior purpose of their own and thus to impair, if not to destroy, the production and sale of articles which it is assumed to be desirable that the public should be able to get." See, also, *Meyerson* v. *Hurlbut*, 98 F. (2d) 232 (C.A. D.C.) (calling a merchant a "price cutter" held to be slanderous *per se*).

position of price cutters likewise was manifested by Congress in its recent amendment of the Sherman Act to exempt such agreements in interstate commerce where permitted under state law. See Act of August 17, 1937, c. 690, 50 Stat. 693, 15 U. S. C. sec. 1. (See Appendix.) We submit that the restraint here involved—that the patented product may not be sold to those who, experience indicates, depress the prevailing retail price, create suspicion and ill will, and destroy the patented product's reputation—bears as much reasonable relation to the patentee's reward as the conditions restricting sales territory, uses for which sold, place of use, method of sale, and sales price, which this Court has sanctioned. *Supra*, pp. 48-49.

The trial court fell into error upon this point by overlooking the fuel and method patents and treating the defendant corporation as the owner of merely the anti-knock fluid patent. Upon this view the patentee merely sold to refiners a patented chemical combination for use in their business and had no concern or control over the lead-treated fuel. So the court says, "Its pecuniary interest, if any, in the marketing and price policies of the jobbers selling gasoline is obviously very remote." (R. 55.) Upon the premises assumed, the court's view is possibly right. But the premises are fatally wrong. Defendant is vitally concerned with the patented lead-treated fuel, the manufacture, sale, and use of which are controlled by its patents. Its pecuniary interest in the price policies of its distributors is direct and important. The return on its invention comes from the public use of the fuel, notwithstand-

ing that it takes the form of payments for fluid. And the effect of price cutting on its return is just as direct as was the effect upon the Colgate Company.

Indeed, since its trademarked lead-treated fuel is a premium priced product, it is directly concerned in any distributing practices which might discourage its being handled profitably by other jobbers. Its action is infinitely more modest. It does not cancel the licenses of price cutters; nor does it threaten to do so; it merely refuses to authorize those who seem most likely to engage in the practice as distributors of its patented fuel. The result is not to maintain any price or price level, or to prevent price competition of which there is a great deal. (R. 60.) It is merely to exclude from the jobber distributor business a small fraction of those who wish to enter it—a small fraction whose past history shows that they can be counted on to undermine the market by price cutting.

The history of the motor fuel industry shows that defendant's apprehension regarding the demoralizing potentialities of such practices upon its patented fuel are not unwarranted. Prior to the period in which these patents have been developed the story is one of recurrent price wars in which the struggle for dealer outlets developed virtually every type of industrial piracy built around localized price cutting.[38] That defendant deemed it sound business judgment not to permit its patented product to be sold to those jobbers whose past history indicated they might deal with it in this fashion can

[38] See Petroleum Industry Hearings, Before the Temporary National Economic Committee, Oct. 9-25, 1939, *passim*.

hardly—and certainly without proof of any effect upon the public—be deemed unjustified.

We have so far discussed the justification and reasonableness of refusing licenses to potential price cutters as though the danger from them to the patentee's interests lay wholly in price demoralization and its direct effects. But this is far from the case. The danger of dilution, substitution, or adulteration is plainly greater in the case of jobber applicants who habitually sell the goods at cut prices and are necessarily operating on a narrow margin, and perhaps often at a loss. Since any cut in price which is likely to attract bargain-seeking trade is apt to equal or exceed the premium of lead-treated over untreated gasoline, substitution or dilution is a simple and obvious way to recoup. Accordingly, defendant corporation's refusal to license particular price cutters was related not only to the general good will of its patented product in the trade but also, and equally, to the accepted fact that the price cutter would undoubtedly be prone to disregard the specific and proper conditions in the jobber license.

For these reasons we submit its refusal, in instances so limited in number as to guarantee the tolerance of its judgment, to license price cutters as distributors of its patented product was not unjustified. Such justification in the long run is dependent upon the prevailing view concerning this type of dealer and the good or ill he does in a competitive system. We have already seen that the attitude of the public, the views of this Court, and certainly the policy laid down by the federal and state legislatures has changed from the early theory that indiscriminate price cutting is an economic lubricant to the realis-

tic belief that it is destructive of fair competition and productive of economic maladjustment.[39] In this connection there is no distinction between the seller of an unpatented article and the licensor under a product patent, who in his own and the public interest licenses others to manufacture it for immediate, wide, and economical availability to the public.[40] In so doing the patentee may justifiably provide that the licensed manufacturer shall not offer it to those whose prior business conduct indicates they may impair its reputation and good will.[41]

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[39] See, also, Brandeis, J., in *Boston Store* v. *American Graphophone Co.*, 246 U. S. 8, 27-28; "[This type of determination] is an economic question. To decide it wisely it is necessary to consider the relevant facts, industrial and commercial, rather than established legal principles." See *Palmolive Co., Ltd.* v. *Freedman*, [1928] Ch. 264; *c.f.* Seligman & Love, "Price Cutting and Price Maintenance" (1932) pp. 94 *et seq.*; *Haring*, "Retail Price Cutting and Its Control by Manufacturers" (1935) c. 8 *et seq.*; and articles and materials collected in Oppenheim, "Cases On Trade Regulation" (1936) pp. 834-35. On the change in policy reflected in the recent amendments to the Clayton Act, see Learned and Isaacs, "*The Robinson Patman Law*" (1937) 15 *Harvard Business Review* 137; Burling and Sheldon, "Price Competition As Affected by The Robinson-Patman Act." (1939) 1 *Washington and Lee Law Review* 31.

[40] In England this interest of the patentee is recognized to the extent of permitting price notices on patented products to control resale prices. See *Columbia Graphophone Co., Ltd.* v. *Thomas*, (1924) 41 Rep. Pat. Cas. 294, *cf. Dunhill, Ltd.* v. *Griffiths Bros.*, (1933) 51 Rep. Pat. Cas. 93.

[41] This argument need not be pressed to the point of contending that the licensee may require cessation of business with those who turn out to be price cutters. For there is a recognized difference between refusing to deal at all with a notorious price

In the present case it is immaterial how such refusal be voiced. The defendant corporation may have required the refiner to sell only to non-price cutters as defined in the license or determined by the licensor. Instead, it refused to license a few notorious price-cutting jobbers and limited its refiner-licensees to selling only to licensed jobbers. As already shown, *supra* pp. 47-60, the defendant Ethyl Corporation has a clear right under its patents to license jobbers. Whether the refusal to permit recognized price cutters to handle its product is effected indirectly through the refiner license or directly through the jobber license is immaterial. From the viewpoint of any unreasonable restraint of trade—with which the lower court was seeking to deal—the justification is equally plain beyond doubt.

III

The decree entered was improper and an abuse of discretion

The defendant Ethyl Corporation did not seek, and does not here assert that it had the right, to use its patents to secure the maintenance by jobbers of any particular price levels on the patented fuel or other gasoline. It believes, and contends in this

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cutter, and requiring maintenance of a general price level on threat of cancellation. See cases cited *supra* note 36. There is an obvious distinction between "price-maintenance," *i.e.*, holding at a high level the prices of all who sell, and the refusal to deal at all with recognized price cutters. In the present case there is no sufficient proof of attempted price maintenance through use of jobber licenses, but at most merely the refusal to license a few notorious price cutters.

Court, that it could justifiably employ its patents to exclude as distributors of its patented fuel a small group of notorious price cutters. But wholly apart from this contention, we submit that the district court's decree goes far beyond anything required to prevent such exclusion and its complete abrogation of the jobber licensing system is wholly unwarranted by the record and unjustifiably limits the patentee in its future development of the patents.

We recognize that this issue involves judicial discretion. But it is well settled that where the decree entered in an anti-trust suit will "obstruct the useful and entirely lawful activities" of the defendants, this Court will order its modification. *Sugar Institute* v. *United States*, 297 U. S. 553, 602. Compare *United States* v. *Standard Oil Co.*, 173 Fed. 177, 192.

We have already noted the court's erroneous conception that the defendant's patents covered only anti-knock (tetraethyl-halide) fluid rather than the patented *fuel*, which such fluid is used to make, and the method of using it in an internal combustion engine. (*Supra* pp. 38-39.) But even though the court overlooked or disregarded these product and method patents, plainly of record, it nevertheless recognized in both its opinion and findings that the Ethyl Corporation had a legitimate interest in insuring compliance with the Surgeon General's health regulations and in protecting the trademark, good will, and reputation of (patented) lead-treated fuel. (R. 54.) Curiously enough, it also recognized that in order to protect these interests, the defendant corporation could

continue to make investigations "just as is presently done." (R. 54). The only practice it found unlawful was the exclusion of price cutters. To prevent the recurrence of such exclusion, it decided that on the record the entire jobber licensing system should be enjoined.

A. ABOLISHING THE WHOLE SYSTEM OF JOBBER LICENSES WAS NOT NECESSARY TO ENJOIN THE EXCLUSION OF PRICE CUTTERS

The district court's objection to defendant's conduct lay solely in the fact that in determining whether to grant jobber licenses it investigated the applicant's price-cutting record and in a number of instances refused to issue licenses because of this record. The court thought that defendant had no justifiable interest in this subject matter and was not warranted in refusing licenses because of it. The court does not voice any criticism whatever of the other grounds upon which refusals were based or in the supervision exercised over those who received licenses but, on the contrary, concedes that defendant's interests were legitimate. It believed, however, for reasons the unfounded character of which we discuss below, that these interests could be protected in other ways. Therefore, because one, and perhaps the most common, reason for the occasional few refusals was objectionable to the court, it abolished the whole system on the theory that no harm was done by the excess of vigor.

A proper decree could have been framed which would have enjoined the objectionable practice only. Such a decree would have more than adequately rem-

edied the situation if it had enjoined defendant from refusing to grant licenses for this reason, from investigating the prior price conduct of any applicant for a jobber license, and, as an additional safeguard, if one were deemed necessary, by requiring that any refusal to license be accompanied in each case by a written statement from defendant as to the reason for such refusal and a summary of the facts upon which it was based. Such an injunction would have been adequate, would have remedied what was deemed an unreasonable restraint of trade, and would have been self-policing.

It is thus apparent that the abrogation of the entire jobber licensing system was unwarranted on the record and that the scope of the decree exceeded the proof of any unlawful activity. In such case modification to conform to prohibiting the evil found has always been the rule. See *Bliss Co.* v. *United States*, 248 U. S. 37, 48; *American Steel Foundries* v. *Tri-City Council*, 257 U. S. 184; *Warner & Co.* v. *Lilly & Co.*, 265 U. S. 526. *Cf. Hague* v. *Committee for Industrial Organization*, 59 Sup. Ct. 954, 964.

B. ABOLISHING THE WHOLE SYSTEM OF JOBBER LICENSES WILL FORECLOSE THE PROTECTION OF ADMITTEDLY LEGITIMATE AND ESSENTIAL INTERESTS, INCREASING IN IMPORTANCE DAILY, IN PUBLIC SAFETY AND THE QUALITY OF THE PATENTED PRODUCT.

Because of the prohibitions of the decree defendant cannot license jobbers. It is thus deprived of the only effective means shown by experience for enforcing compliance by the jobbers with the Surgeon General's regulations. Defendant is likewise foreclosed from the only effective method of insuring

that the patented lead-treated fuel will not be diluted, adulterated, or permitted to deteriorate. Likewise, as to that part of the patented fuel sold under the "ETHYL" trademark, it is placed in a position where it cannot effectively prevent substitution. Compare *Coca-Cola Co.* v. *Bennett*, 238 Fed. 513 (C. C. A. 8th). We have already reviewed the evidence and obvious business factors which will cause this result, in discussing the necessity for jobber licenses, *supra* Point II, pp. 56-60. We submit that these jobber licenses—the right to issue which cannot be questioned and the conditions of which are in no way alleged to be improper—are essential for the protection of defendant's vital interests in the protection of the public safety and the quality of its product.

The district court thought otherwise. Its manifest error in doing so can most readily be seen by examining the extent to which it departed from the record in reaching its conclusion. After recognizing in both its opinion and findings that defendant had a legitimate interest in securing compliance with the Surgeon General's regulations and in protecting the trademark, good will, and reputation of the patented product (R. 54, 58), the court stated that to protect these interests the defendant corporation could make investigations "just as is presently done." (R. 54.) The court then assumed that as to the health regulations, the use of jobber licenses "is not the *only method* by which observance . . . can be enforced" (R. 54), and that as to dilution, adulteration, and deterioration, the patentee may be "protected without any resort to the jobber license de-

vice."[42] (R. 54.) There is no support whatever in the record for this bland assumption. The court itself notes that the refiners have

> "been tried and found wanting, but this apparently was due to an unwillingness on the part of refiners to conduct their own investigations of jobbers' retail outlets." (R. 54).

Despite this, it still assumes that, where defendant's field investigations reveal violation, remedy may be secured through its refiner-licensees. The court does not consider how as a practical business matter defendant could cancel a refiner's license simply be-

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[42] The citation by the court at this point of the *International Business Machines* case, 298 U. S. 131, indicates its confusion. That case involved a *tying clause*, in the lease of a patented tabulating machine, which required the purchase of the lessor's cards. The tying clause was specifically prohibited by the Clayton Act; yet the lessor insisted that the use of cards other than its own would impair the good will of the patented tabulating machine. After pointing out that the Clayton Act permitted no exceptions, this Court stated by way of dicta that the patentee could protect its good will by providing in its lease that only cards conforming to its specifications could be used. (298 U. S. at 140). The case in no way suggests that license provisions to safeguard good will are improper. Nor do its peculiar facts warrant any *a priori* assumptions as to what is or is not an effective method for securing such protection in the commercial situation involved in the present case.

Moreover, we do not believe that the patentee must demonstrate that any method it selects to exploit its patents is the *only* method which might be effective, even though it is clear that in the present case such demonstration can be made from the record. *Supra*, pp. 56-60.

cause such refiner would or could not insure compliance with the health regulations or the quality requirements by every small retail outlet owned by a jobber or by every retailer among the hundreds served by each of his jobbers. There is no basis of record for the assumption that action through refiners would be effective. Indeed, the record shows the contrary, *supra* pp. 30, 56-60, and the court itself, as shown above, came to somewhat the same conclusion. In short, the court without record support concludes that the defendant should do indirectly what the injunction prohibits it from doing directly and that every present requirement in its jobber licenses may be enforced indirectly (and ineffectively) by defendant through its refiner licenses, but may not lawfully be accomplished directly (and effectively) through jobber licenses.

Beyond this suggestion—that reporting to refiners the results of defendant's field investigations might suffice—there is nothing in the record, opinion, or findings to indicate what "other methods" may be used to enforce the health regulations[11] or protect the good will in the patented product. It is thus obvious there is no support for the lower court's conclusion that the protection of defendant's legitimate interests can be achieved other than through

[11] We have already indicated, *supra* notes 10 and 33, the utter lack of support in the record for the court's further assumption that there is little need for the defendant to concern itself with lead warning signs because it supplies them at the nominal charge of seven cents. Suppose it gave them away?

jobber licenses. The complete abrogation of such licenses forecloses protection of such interests necessary under conditions prevailing at the time of the Stipulation.

But the unjustifiable damage done by this drastic decree must be considered not only with reference to conditions prevailing in 1938 but in the light of what will be required during the remaining life of the product and method patents. This Court will judicially notice that the oil refining business is not static but in a continual state of evolution." Through commercially proved catalytic refining methods gasoline of very high octane rating can be produced without the use of these patents. See Statement, *supra* pp. 36-38. Indeed, fuel equal in octane rating to the "ETHYL" standard specified in the Stipulation is now being regularly manufactured outside the pat-

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" See, in addition, to the materials cited *supra* note 24: "Petroleum Industry Hearings, Temporary National Economic Committee, Oct. 9-25, 1939; "Refining Technology," *National Petroleum News*, Jan. 10, 1940, p. R-3 *et seq.*, (showing refinery construction and new methods in use during 1939); Egloff, "The Cracking Art in 1938", (annual review giving processes, statistics, research, and some 254 pages of new patents, in 1938). Compare Hearings Before Senate Subcommittee of the Committee on Mines and Mining on S. 2027, Federal Petroleum Act, 74th Cong., 1st Sess., April 16-17, 1935; Hearings Before Senate Subcommittee of the Committee on Finance on S. 790, 75th Cong. 1st Sess., Feb. 12-17, 1937; Hearings Before House Subcommittee of the Committee on Interstate and Foreign Commerce, on S. 790 and H.R. 5366, 75th Cong. 1st Sess., April 27-29, May 3, 1937; Hearings Before *idem* on S. 1302, H.R. 4547, and H.R. 2308, 76th Cong. 1st Sess., April 26-28, 1939.

ents and being sold at lower prices than the patented product. This does not mean that the use of tetraethyl lead to produce a high octane motor fuel under the patents will soon be over. Defendant may be driven to licensing the production of patented fuel containing far higher lead concentrations and possessing an exceedingly high octane rating. Through supercharging of motors and greater possible compression ratios, resulting in further efficiency and economy, the product and method patents have a wide field of continued use in the offering of lead-treated fuel to motorists.[45]

No one, and certainly not a court, can foresee all of the future problems. Certain it is that the use of higher percentages of tetraethyl lead will require some re-examination and revision of the Surgeon General's regulations and possibly the imposition of further safeguards. To take from this patentee its entire right to license jobbers under its product and method patents is to circumscribe, if not to foreclose, future development. It constitutes a drastic penalty upon the enterprise responsible for the wide adoption of a valuable series of inventions, and curtails the future securing of the full return possible from the patents.

Accordingly, we respectfully submit that because its provisions abolishing the whole system of jobber licenses were not necessary to enjoin the exclu-

[45] See Edgar, "The Manufacture And Use of Tetraethyllead", 31 *Industrial & Engineering Chemistry* (1939) 1439, for performance data underlying this development.

sion of price cutters, and because the court's decision to do so was based on sheer assumptions unwarranted by the record, and because such abrogation of all jobber licenses will foreclose defendant in its present and important future efforts to protect its admittedly legitimate and essential interests in public safety and the quality of its patented product, the decree entered should, in any event, be reversed with directions that it be modified to prohibit only what has been deemed unlawful. As it stands, even upon the view taken by the lower court that jobbers may not be refused licenses because of a prior history of price cutting, the decree is a cumbersome, drastic, and unjustifiable solution.

CONCLUSION

It is respectfully submitted that the decree of the District Court be reversed with instructions to dismiss the petition.

DEAN G. ACHESON,
H. THOMAS AUSTERN.

January, 1940.

APPENDIX

Section 1 of the Sherman Act, as amended (26 Stat. 209, 50 Stat. 693, 15 U. S. C. § 1):

"Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal: *Provided*, That nothing herein contained shall render illegal, contracts or agreements prescribing minimum prices for the resale of a commodity which bears, or the label or container of which bears, the trade mark, brand, or name of the producer or distributor of such commodity and which is in free and open competition with commodities of the same general class produced or distributed by others, when contracts or agreements of that description are lawful as applied to intrastate transactions, under any statute, law, or public policy now or hereafter in effect in any State, Territory, or the District of Columbia in which such resale is to be made, or to which the commodity is to be transported for such resale, and the making of such contracts or agreements shall not be an unfair method of competition under section 5, as amended and supplemented, of the Act entitled 'An Act to create a Federal Trade Commission, to define its powers and duties, and for other purposes', approved September 26, 1914: *Provided further*, That the preceding proviso shall not make lawful any contract or agreement, providing for the establishment or maintenance of minimum resale prices on any commodity herein involved, between manufacturers, or between producers, or between wholesalers, or between brokers, or between factors, or between retailers, or between persons, firms, or corporations in competition with each other. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding $5,000, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court."

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No. 536

Supreme Court of the United States

OCTOBER TERM, 1939

ETHYL GASOLINE CORPORATION, EARLE W. WEBB AND JOHN COARD TAYLOR, *Appellants*,

v.

THE UNITED STATES OF AMERICA

ON APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK

REPLY BRIEF FOR APPELLANTS

DEAN G. ACHESON,
H. THOMAS AUSTERN,
Counsel for Appellants.

Supreme Court of the United States

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REPLY BRIEF FOR APPELLANTS

Because of some inaccurate statements of the record, because of constant distortion of the patent issues, and because of the circuitous reasoning prevalent in appellee's brief, we deem it desirable to file this reply brief.

I

THE VALIDITY OR SCOPE OF THE PATENTS IS NOT IN ISSUE

Neither the validity nor scope of the four patents owned by the Ethyl Corporation is in issue in this case. They were not questioned in the original petition (R. 1-9). They were not questioned in the lower court. And the Government professes not to discuss their validity "or even the value of these patents" in

this court (p. 56).[1] Instead, by constant misstatement of what the patents cover, by attempted analysis of the inventions, and by unwarranted and inaccurate references to their allowance by the Patent Office, the issues are confused. An understanding of these underlying facts is a prerequisite to decision. They can be simply stated:

A. Defendant's patents cover (1) lead-treated motor fuel, (2) the use of lead-treated fuel in a motor car, and (3) an improved anti-knock fluid. The first two inventions are of primary importance and are covered by the early applications. Not a single claim of these patents relates to an anti-knock *fluid*.[2] The *only* patents claiming an anti-knock *fluid* are the two later improvement patents (Appellants' Brief, pp. 10-12).

Appellee constantly and indirectly misstates these facts: It attempts by reiteration to persuade the Court that the only patent here involved is that on the fluid. Reference is made to "lead-treated gasoline", or "lead-treated motor fuel"—without disclosure that the patents cover these products—and emphasis is constantly misplaced on the use or sale of "patented fluid" alone.[3] If the only patents which

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[1] Unless otherwise noted, page references in this reply brief are to appellee's brief.

[2] Each claim in Patent No. 1,573,846 covering lead-treated gasoline claims "A fuel . . ." (R. 77-78). The three claims of Patent No. 1,787,419, the method patent, refer only to burning gaseous mixtures in the presence of vaporized metallic compounds (R. 84).

[3] Such misstatement occurs throughout the Government's brief. To illustrate: P. 10, the licensing system "is based on the premise that no one can manufacture, sell, or use [the patented] motor fuel which contains the patented fluid [through use of the patented method of combustion] unless authorized."

the Court need examine were those on the fluid, neither we nor appellee would be concerned with the others. In fact, the issues in this case turn on the two basic fuel and method patents and not at all on the improvement fluid patents.

We do not believe such tactics will succeed in obscuring what is fundamentally raised in this appeal. Perhaps the most enlightening correction would be to ask the Court to read the adjective "patented" wherever appellee uses the terms "lead-treated gasoline" or "motor fuel". See note 3, *supra*. Similarly, where appellee discusses the "marketing of gasoline" or "access to market", we are confident that this linguistic device for forgetting the two basic patents will fail. What is meant is the right to market the patented lead-treated gasoline and the licensed right to authorize use of the patented combustion method.

B. In a further effort to avoid the force of record facts, appellee for the first time on this appeal charges impropriety in the division of the original application, which was required by the Patent Office and which resulted in the technical division, into two patents, of the fuel product and combustion method claims *originally made* in the application. It is stated that there was merely "one important and novel contribution", namely, the fluid, and that "by an astute division of patent rights" claims for the lead-treated fuel and method of combustion were obtained (pp. 66-67).

This is a gross misstatement.

First, the Court should know that the formal division into two patents of the fuel and method claims originally made was specifically *required* by the Pat-

ent Office. The file wrapper[4] shows that the applicant objected to the required division lest it lead to double patenting; that this question was twice appealed to the Examiner of Classification (the reviewing officer), and that division was required on the ground that two separate inventions requiring separate examination and ultimately separate patents were contained in the application. (Incidentally, the administrative decision on this matter showed that these inventions were so novel that not a single reference could be cited against the claims.) The charge, which appellee makes, that the licensing system, which has made these inventions available to every motorist, should be deemed illegal because of improper and "astute division of patent rights" is manifestly unfounded.

Second, the question as to the scope of the patents or the propriety of their allowance n t only is inconsistent with the Government's position on this appeal (p. 56), but is also without foundation in law. The division of patent applications and their examination for issuance of patents is an administrative matter conferred upon the Patent Office and controlled by its rules. (Compare Rule 41. See also Rivise, "Patent Applications" §§ 187-204.) Appellee's belated endeavor to interject this foreign issue,

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[4] It was stipulated by letter in advance of trial that if the validity of these patents was disputed by the Government, the appellants would be entitled to offer the various file wrappers. In view of the contentions now made for the first time in appellee's brief, we therefore feel justified in referring to this material.

in support of its attempt to treat this case as involving only a patent on the fluid, must be rejected.

Third, neither of the patents concerned in the divided application related to fluid (*supra*, pp. 2-3). And the discovery that the addition of halides prevented fluxing, though only an improvement, was in itself an important invention upon which the fluid patents are deservedly allowed. (See Appellants' Brief, pp. 11-12.)

II.

The right to license jobbers

With the facts as to the patents clear, the fallacies in appellee's argument on the patent law become apparent. In its Point I, pp. 27, 33-46, the Government makes two contentions: First, that the licensing system restrains trade because defendant thereby determines "who shall be allowed to enter the market"—*i. e.*, who shall deal in defendant's *patented fuel* and be authorized to license others to use the *patented method*. Any valid patent or patent license restrains trade. The question is whether the patents and licenses are valid. That question is not decided by simply forgetting the patents and licenses, and treating the case as though neither patents nor licenses were involved.

Second, the Government contends—again conveniently neglecting the patents—that defendant restrained trade by compelling jobbers to maintain refiners' resale prices. This question, as to which the lower court found no case has been made, is fully covered in our main Brief, pp. 34-35; and we shall briefly examine the appellee's argument, in demon-

strating that defendant had not in any way abused its clear right to license jobbers, *infra*, pp. 12-15.

In Point II, appellee takes the extraordinary position that defendant under its patents has no right or power to control the marketing of its patented fuel or the use of its patented combustion method, by licensing either refiners or jobbers (p. 47). In the first place, there is here the same fundamental error in the assumed premise that only a patented *fluid*, and not a patented *fuel* and patented combustion *method*, is involved[5] (pp. 48,-50-51). Thus appellee elaborately argues that with the sale of a patented product, patent control usually ends. We agree. But these licenses, as we point out in our main Brief (pp. 47-61) do not rest on the fluid patent but on the fuel and method patents. And as we there show, without the particular licensing system and license requirements predicated on those patents, these inventions could not have been safely and widely made available to the motoring public.

The Government leans heavily on the fact that defendant gets its composite financial return on the patents in the sales price of the patented fuel (pp. 47, 79). This is immaterial. The sales contract and refiner licenses are contained in a single instrument—which covers all four patents—and there is no warrant for assuming that only return on the improvement patents is obtained. For convenience,

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[5] *E.g.*, p. 48. "Having chosen to exploit its patents in this particular way, can appellant sell the patented fluid and at the same time control the subsequent marketing and use [according to a separately patented method] of the [patented] motor fuel containing the patented fluid?" Completely to change the issues by omitting the bracketed words, as appellee has done, does not contribute to the decision in this case.

defendant gets its return in one payment. Can it be seriously contended that this payment is not thereafter reflected in the sales price of the patented lead-treated gasoline? Could the Government contend that defendant may not equally apply its margin above manufacturing costs toward the amortization of each of these patents? Carried to its logical conclusion, appellee's argument would mean that any patentee owning several patents who took a single royalty would impair his rights. Or that the owner of a basic patent who later granted licenses under an improvement patent without further royalty would be acting beyond the scope of his later patent. Or that the grant of a limited development license free of royalty would foreclose all future charges. Where a group of commonly owned patents are used for the commercial development of a series of inventions, the manner in which the patentee levies a reasonable royalty is immaterial.

Still pursuing its fundamental fallacy that the only invention was that of an anti-knock fluid, the Government next argues (pp. 58-70) that exercising rights under the fuel and method patents is somehow an attempt to control "subject matter which lies outside the legal scope of that patent privilege" (pp. 58-59). We confess our inability to follow this reasoning. How the use of the patent monopoly, conferred by a patent of unquestioned validity, can be "outside the legal scope of that privilege, even though included within the claims made in the patent" (p. 59) is difficult to see.

Nor do the cases discussed at length by appellee illuminate its position. In each of them, as pointed out in our main Brief (pp. 54-55, note) the patentee

owned a patent on a product or a process but not both. In each, he attempted to utilize the patent on what he had to secure a monopoly of what his patent did not cover. Here defendant has patents on both the product, lead-treated fuel, and the method of combustion in which it was used.[6] The citations are inapposite. Either defendant has patents on lead-treated fuel and the combustion method and can exercise rights conferred by such patents, or such patents are invalid or have been destroyed. To argue that defenedant never had the power to license because its unquestioned patents cover more than appellee would like to have had them cover in this case, is simply to argue in a circle.

Ultimately confronting the record facts, appellee is driven to the charge, already discussed, that these basic patents were obtained through an improper division of the original application. We have already shown that this contention is unfounded in fact, unwarranted in law, and distorts both the dates and claims of the patents. Moreover, appellee's illustrations (pp. 67-69), apart from being a couvert attack on patent validity which it has throughout admitted, confuses both Patent Office procedure and patent law. No elaborate treatise is necessary in reply. It is axiomatic that the function which a patented product performs or the result it achieves is not in itself

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[6] The citation and quotation, on p. 65, from *Motion Picture Patents Co. v. Universal Film M'f'r'g Co.*, 243 U. S. 502 at 519, is not in point. For not only did that case concern the validity of restrictions after the sale of a patented product alone (without coexisting process patents), but also the restriction discussed derived, its force not from any license but merely from a notice attached to the patented product.

patentable, *e. g.*, closing a coffin, creating sound, moving a piston, etc. (p. 68). *Holland Furniture Co. v. Perkins Glue Co.*, 277 U. S. 245, 257. In the present case, the combustion *method* can be practised by introducing a volatile metallic compound into the engine in any fashion. (See Appellants' Brief, p. 12, note.) This was a separate, novel invention allowed as patentable. The product, lead-treated fuel, consisting of the combustion of soluble tetraethyl lead and gasoline was likewise new and a separate patent for it was insisted upon by the Patent Office. Neither allowance is here in issue.

Thus, on the right of defendant to license jobbers under its patents, appellee's diverting and ingenious efforts to present some case other than that before this Court must be rejected. They are predicated either upon a total disregard of the patents, Point I, or, in Point II, upon an unsuccessful attempt to confuse the patent law questions by limiting consideration to the fluid patents alone, by arguing that the unquestioned claims of the fuel and method patents are beyond the scope of the patent monopoly, or by insisting contrary to the facts and through couvert attack that these basic patents were improperly allowed by the Patent Office. We respectfully refer the Court to the discussion of the right to license contained in our main Brief (pp. 47-54).

III

The reasonableness of the license conditions

Appellee in its Point III attempts to meet one of the fundamental issues in the case: Whether the license conditions contained in the jobber licenses were reasonably incident to the commercial development of

The prevention of adulteration and dilution of the patented fuel is sought to be minimized by appellee in equally tenuous fashion. The contention is that patentee has no interest in the reputation of the patented product but that this is the refiner's interest alone. The recurrent fallacy that defendant has a patent only on the fluid alone is repeated (p. 79). And counsel's *a priori* assumptions (p. 81) as to what might happen in the absence of license prohibitions against adulterations and dilution are made the basis for the unrealistic suggestion that defendant, whose revenue is obviously dependent upon the volume of the patented fuel sold, has no interest in its quality.

IV

Alleged price maintenance and exclusion of a few price cutting jobbers

Appellee seeks to support the decree below by substituting in support of it a basis other than that used by the lower court. To do so rejects the specific finding of the District Court that no case of price maintenance has been made out on this record (R. 60). We submit that the unwarranted selection and rejection among the stipulated facts, which the Government has made (pp. 39-40) cannot be accepted.

This portion of the stipulation is fully analyzed on pages 34-35 and 60-61 of our main Brief. Two examples of the fashion in which the record has been distorted by appellee should suffice. A sentence in the "Field Representative Manual" of the defendant corporation is lifted wholly out of context and given a meaning which it does not have. Compare the

quotation from R. 183 with "Standardization" and "Piping Layouts" on R. 184.

Next, despite the unequivocal stipulated fact that jobber licenses were not canceled because of any failure to maintain the policies, practices, and prices of the refiners, appellee misstates the record on this issue. It recites that in a few instances defendant "has gone so far as to refuse a new license to a jobber who wished to change his source of supply because he had not maintained the policies, practices, and prices" of refiners (p. 40). This misstatement is alleged to be based on Paragraph 22 (R. 38-39) of the Stipulation. In fact, it represents an improper rewriting of two sentences in that paragraph, and its inaccuracy is clearly shown by Paragraph 24 (R. 39) in which it is made perfectly clear that in the instances in question there was controversy as to whether the contract between the refiner and the jobber had been terminated. See Appellants' Brief, p. 32, note.

Appellee next asks this Court to set aside the finding of the lower court on an argument embodying a complete *non sequitur*. It is conceded that defendant never stated that it would cancel jobber licenses because of price cutting; that there has been a great deal of price cutting, and that defendant never canceled a license once it was issued (R. 37). The lower court specificially so found (R. 51, 60). The Government argues, however, that because a few jobbers without warrant believed that in order to hold their licenses they would have to maintain prices, defendant created "this frame of mind without making public announcements and without actually canceling licenses" (pp. 42-43). On this basis, an at-

tempt is made to bring the present case within the rule of the *Beech-Nut* case.

We pass the obvious difficulty which the Government faces on the facts in seeking to prove circumstantially that prices were maintained through means of the jobber licenses when it is stipulated that they were not.[8] For it seems clear that no case of unlawful price maintenance through *coercion* can possibly be made out where it is conceded that defendant did not exert any coercion, that (unlike the *Beech-Nut* case) it never canceled a license because of price cutting, and that in fact "there has been and is a great deal of price cutting on the part of licensed jobbers" (R. 60).

We submit that on the issue whether these jobber licenses have been used, wholly beyond their specific conditions, to secure maintenance of refiners' prices, the finding of the lower court cannot be disturbed.

On the issue whether the occasional refusal of a license to jobbers who had a record as notorious price cutters constituted an unlawful restraint of trade, we need add little to our discussion on pages 61-71 of our main Brief. It may be helpful, however, to point out that the Government's short discussion of this point (pp. 84-91) rests upon the persistent assumption that the patents cover only a patented fluid (p. 87), that defendant's sole interest is in the "sale

[8] In view of the Government's ingenious attempt to argue that the mere existence of defendant's licensing scheme resulted in country-wide price maintenance of refiners' prices, it is interesting to note that in *United States* v. *Socony-Vacuum Oil Co.*, October Term, 1939, Nos. 346-347, recently argued, the Government contended that prices in one important marketing area were maintained by action having nothing whatever to do with these licenses. See Government brief in that case, pp. 29-34.

of the patented fluid" (p. 88) and that the defendant has no interest in the patented motor fuel. There is further some talk about *a priori* arguments and the suggestion that the volume of gasoline sold increases with lower prices (p. 89). Appellee completely disregards the fact that lead treatment is an element of cost (though it calls attention to defendant's profits), and that the effect of continuous price cutting on the sale of the patented fluid would be direct and important. For unless the cost of lead treatment can be recouped, there will be a strong commercial impediment to use of defendant's patents. As we have pointed out, defendant in a very limited number of instances took the reasonable view that it was desirable not to permit such dealers to deal at all in its patented fuel. We have likewise demonstrated the relationship between consistent price cutting and the danger of dilution, substitution or adulteration of the patented fuel. Appellants' Brief, p. 69.

Finally, appellee suggests that the initial exclusion and refusal to deal with a few notorious price cutters is the legal equivalent of price maintenance (p. 90-91). We are satisfied that an examination of the discussion of this question and the cases cited in our main Brief (pp. 63-67) will readily indicate the hollowness of this argument.

V

The scope of the decree

In our main Brief (pp. 71-80) we demonstrate that even assuming that defendant could not justifiably exclude as distributors of its patentable fuel a small group of notorious price cutters, the decree of the lower court goes far beyond anything required to

prevent such exclusion and its complete abrogation of the jobber licensing system is wholly unwarranted and unjustified. Appellee insists that the decree below was warranted principally because it disagrees with the lower court's finding that there was no price maintenance. Apart from this, the argument is that the existence of the jobber licensing system offers opportunity for price maintenance (p. 93). Any patent license system might, outside and beyond its specific conditions, be subject to abuse. Obviously, appellee's argument proves too much, and under it any patent licenses, no matter how proper their terms, would fall. Consequently, since defendant has the right to license jobbers, and since misuse of the necessary and reasonable conditions in its jobber licenses has not been established, the lack of justification for abolishing the entire system is manifest. As we point out in our main Brief, the effect of such abrogation will seriously impair defendant's future use of these patents.

Respectfully submitted,

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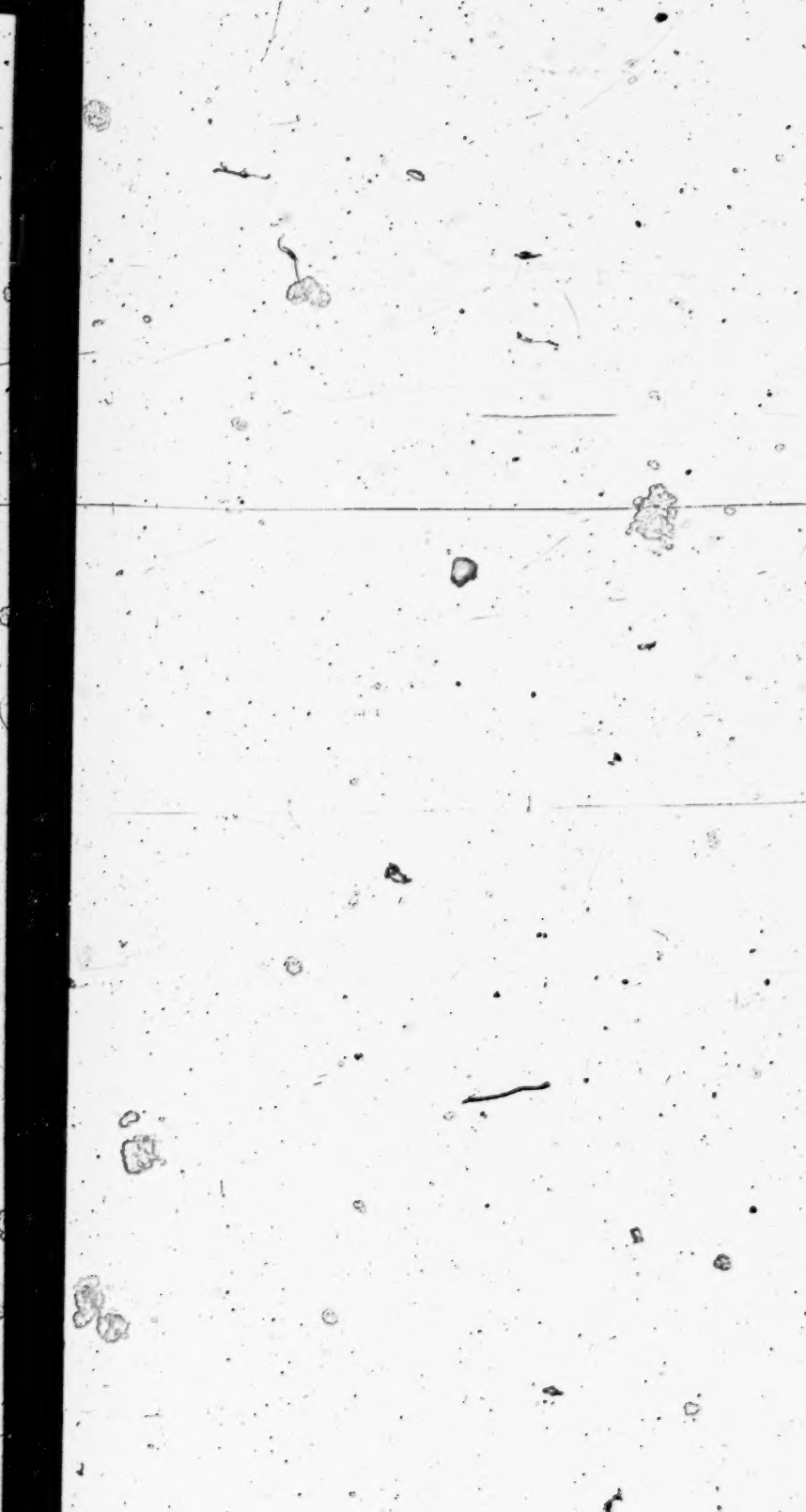
February, 1940.



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In the Supreme Court of the United States

OCTOBER TERM, 1939

No. 536

ETHYL GASOLINE CORPORATION, EARLE W. WEBB, AND JOHN COARD TAYLOR, APPELLANTS

v.

THE UNITED STATES OF AMERICA

ON APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK

BRIEF FOR THE UNITED STATES

OPINION BELOW

The opinion of the District Court (R. 43) is reported in 27 F. Supp. 959.

JURISDICTION

The final decree of the District Court was entered on August 14, 1939 (R. 62). An appeal was allowed on October 9, 1939 (R. 69). The jurisdiction of this Court to review the decree of the District Court upon direct appeal is conferred by Section 2 of the Expediting Act of February 11, 1903, as amended, 32 Stat. 823, 36 Stat. 1167,

U. S. C., Title 15, Sec. 29; and Section 238 of the Judicial Code, as amended, 36 Stat. 1157, 38 Stat. 804, 43 Stat. 938, U. S. C., Title 28, Sec. 345. Probable jurisdiction was noted on December 11, 1939.

QUESTION PRESENTED

Appellant (the Ethyl Gasoline Corporation) is the owner of patents purporting to cover (1) a fluid composed chiefly of tetraethyl lead, (2) motor fuel containing the patented fluid, and (3) the use of the motor fuel in internal-combustion engines. Appellant manufactures and sells the patented fluid to refiners whom it licenses to manufacture, distribute, and sell motor fuel purportedly covered by appellant's patents. The licenses require refiners to sell the motor fuel only to jobbers who are licensed by appellant. The question presented is:

Has appellant, through the use of its licensing plan, restrained trade in violation of the antitrust laws (a) by excluding jobbers from the market unless they accept and comply with the terms and conditions dictated by appellant; and (b) by compelling jobbers to abide by the marketing practices and price policies prevailing in the industry and thus compelling them to maintain resale prices?

STATUTE INVOLVED

Section 1 of the Act of July 2, 1890, c. 647, 26 Stat. 209, U. S. C., Title 15, Sec. 1, known as the Sherman Act, as amended by the Act of August 17, 1937, c. 690, 50 Stat. 693, provides in part as follows:

SEC. 1. Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal. * * *

STATEMENT

INTRODUCTION

This is an appeal from the decree of the United States District Court for the Southern District of New York perpetually enjoining appellants (a) from licensing jobbers to sell and distribute lead-treated motor fuel and (b) from enforcing provisions in licenses issued to refiners which permit them to sell lead-treated motor fuel only to licensed jobbers (R. 62–64). The suit was commenced by a complaint filed on February 19, 1937, charging that appellants, by means of the licensing policies and practices therein described, had violated the Sherman Act by unlawfully restraining the manner of sale and the prices of the greater part of all gasoline sold in interstate commerce (R. 1–9). Appellants by their answer denied the charges in substance but admitted that they had followed many of the practices and policies described in the complaint and alleged additional facts purporting to justify their conduct (R. 9–17).

THE FACTS

Counsel for the parties stipulated that the issues raised by the pleadings should be tried on an agreed

statement of facts (R. 18). The pertinent facts are:

1. *Appellants.*—Ethyl Gasoline Corporation (hereinafter referred to as the Ethyl Corporation or as appellant) is a corporation organized in 1924 under the laws of the State of Delaware and has its principal place of business in New York City. One-half of its capital stock is owned by the Standard Oil Company (New Jersey) and the remainder is owned by the General Motors Corporation and E. I. du Pont de Nemours Company. Earle W. Webb is the president of the Ethyl Corporation and John Coard Taylor is its vice president in charge of sales, and both are parties to this appeal (R. 18).[1]

2. *The Business of the Ethyl Corporation.*—The Ethyl Corporation is engaged in the business of manufacturing and selling a fluid consisting principally of tetraethyl lead (R. 18). The composition of the fluid is covered by Letters Patent of the United States: No. 1,592,954, issued July 20, 1926; and No. 1,668,022, issued May 1, 1928 (R. 19, 20, 79–82). The Ethyl Corporation owns these patents and is the sole producer of the fluid in the United States (R. 19). The fluid is sold by appellant to refiners to be mixed with the latter's gasoline, and with the intention that the treated

[1] It is stipulated that each of the acts and practices of Ethyl Corporation referred to in the agreed statement of facts was done under the authority, express or implied, of Webb and Taylor (R. 42).

gasoline shall be used as motor fuel (R. 23). Sales of the fluid are made only to refiners who have been licensed by the Ethyl Corporation and such sales constitute the corporation's sole source of income (R. 23–24). The record does not disclose the actual figures, but it is stated that the corporation's annual profits are "very substantial" (R. 24).

Although the Ethyl Corporation engages solely in the business of manufacturing and selling the patented fluid, it holds patents purporting to cover the subsequent use of the fluid in making a motor fuel and the use of such fuel in internal-combustion motors. The claim to the process of producing motor fuel through physically mixing small portions of the patented fluid with quantities of ordinary gasoline is contained in each of the two patents described above and in Patent No. 1,573,846, issued February 23, 1926 (R. 19–20, 74–82). The claim to the use in motors of fuel containing the patented fluid is set forth in Patent No. 1,787,419, issued December 30, 1930 (R. 19, 20, 83–84). In manufacturing and selling the patented fluid, the Ethyl Corporation performs no operations which are covered by the patent claims which relate to the use of the patented fluid in manufacturing motor fuel or the use of that motor fuel in internal-combustion motors. Nor does the Ethyl Corporation collect any royalties or other charges under licenses

of these patents. Instead, as is explained at pages 9–14, *infra*, it purports to grant royalty free, limited licenses under these patents to purchasers of the patented fluid and to certain customers of those purchasers (R. 25–27, 101–129).

3. *The Use of the Patented Fluid in the Production of Motor Fuel.*—The Ethyl Corporation manufactures and sells the patented fluid solely for use in the production of an improved type of motor fuel (R. 23–24). The value of the fluid lies in the fact that small quantities, when mixed with gasoline, will reduce or eliminate the knocking which results from burning a mixture of gasoline and air in a motor of relatively high compression (R. 18). By increasing the compression of an automobile engine the efficiency is increased and the motor will generate more power and run longer on a given quantity of fuel. Hence smaller motors of high compression will perform the same task more efficiently than larger low compression motors (R. 19).

The utility of a motor fuel for use in high-compression motors is generally expressed in terms of octane numbers.[2] The amount by which the octane rating of a particular gasoline is increased through the addition of the patented fluid is directly dependent on the quantity of fluid which is mixed

[2] The octane numbers for gasoline are merely an arbitrary scale used to indicate the degree of compression to which the fuel may be subjected without causing a knock (R. 19).

with the gasoline (R. 25–26). In licensing refiners to mix the patented fluid with their gasoline, the Ethyl Corporation divides the field of motor fuels to be manufactured under its patents into two divisions on the basis of the quality or octane rating of the fuel to be produced, *i. e.*, ethyl gasoline and regular gasoline. All gasoline, except so-called "third grade" gasoline is of high octane or anti-knock value (R. 25).[3] The amount of tetraethyl lead contained in a gallon of either ethyl gasoline or regular gasoline is extremely small. A gallon of regular gasoline contains one part of tetraethyl lead to 4,200 parts of gasoline. A gallon of ethyl gasoline contains one part of tetraethyl lead to 1,700 parts of gasoline. (R. 26.)

Although no other substance comparable to the patented fluid is manufactured and sold commercially, there are other methods of producing gasoline of high octane value (R. 21–22).[4] However,

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[3] It is stipulated that gasoline of high octane or anti-knock value shall be deemed to be gasoline having an octane rating of 68 or more (R. 25).

[4] Improved refining processes have been developed by which it is possible to produce some gasoline of high octane value (R. 21–22). High octane ratings may be achieved by adding benzol or alcohol to gasoline but this method has not been used to any extent (R. 23). Alcohol has never been used commercially to any significant extent in this country although it has been used abroad for many years. Insufficient quantities of benzol are available for this purpose. Only about 2 percent of all gasoline is treated with benzol. (R. 23.)

the principal means of producing motor fuel of high octane value is by mixing the patented fluid with ordinary gasoline. Approximately 85 percent of all gasoline of high octane value sold in the United States contains the patented fluid manufactured and sold by the Ethyl Corporation (R. 23).

Approximately 80 percent of all gasoline sold in the United States is processed so as to obtain high octane rating. A substantial portion of the remaining 20 percent is sold as so-called "third grade" gasoline. Consequently, the fluid is at present an essential ingredient in 85 percent of the better grades of gasoline sold in the United States and in 70 percent of all gasoline sold in the United States. (R. 23.)[5]

All major oil companies except Sun Oil Company, American Oil Company, and the Shell Companies use the fluid in substantially all of their regular and premium gasoline (R. 22–23, 26).[6] In all, the Ethyl Corporation has issued licenses to 123 refiners, who together refine and sell approxi-

[5] Testimony before the Temporary National Economic Committee indicated that 522,000,000 barrels of motor fuel, or nearly 22,000,000,000 gallons, were consumed in the United States in 1938. *Verbatim Record of the Proceedings of the Temporary National Economic Committee*, Vol. 6, page 25, Bureau of National Affairs, Inc.

[6] The Shell Companies are licensed to use the fluid and do so in their premium and part of their regular gasoline. The American Oil Company has a license for use of the fluid but by preference treats its gasoline with benzol. The Sun Oil Company has never applied for a license to use the fluid. (R. 23.)

mately 88 percent of all gasoline sold in the United States (R. 26).. Included in this group is every major oil company except the Sun Oil Company (R. 22–23, 26).

4. *Interstate Commerce in Gasoline.*—The greater part of all gasoline manufactured at refineries and the greater part of all gasoline treated with the patented fluid is sold and transported in interstate commerce from the states in which the refineries are located into the other states of the United States. The gasoline is sold in part through wholesale and retail outlets owned or controlled by the refining companies, in part to independent retailers and consumers, and in part to jobbers for resale to retail dealers and consumers. (R. 24.)

A substantial part of all gasoline sold and distributed in the United States is distributed through 12,000 jobbers doing business in the several states. The greater part of the gasoline purchased by the jobbers is delivered to their bulk storage plants through the channels of interstate commerce. The jobbers, in turn, sell and distribute a small part of the gasoline in interstate commerce. (R. 25.) Of the 12,000 jobbers in business approximately 11,000 are licensed by the Ethyl Corporation to distribute and sell gasoline treated with the patented fluid (R. 27).

5. *The Licensing System Established by the Ethyl Corporation.*—The issue in this case is the

legality of appellant's licensing system. That system is based on the premise that no one can manufacture, sell, or use motor fuel which contains the patented fluid unless authorized to do so by the Ethyl Corporation. In the exercise of its asserted patent rights the appellant grants licenses to (a) refiners who manufacture gasoline using the patented fluid for that purpose and (b) jobbers who purchase the gasoline from refiners and resell it to retailers and consumers.[7] The aspect of the licensing scheme under attack consists of restrictive provisions in the license agreements designed to prevent all jobbers not licensed by the corporation from purchasing, selling, and distributing gasoline treated with the patented fluid. The manner in which these provisions operate will appear from the following discussion of the licenses.[8]

(a) *Refiner licenses.*—Ethyl Corporation licenses refiners who purchase the patented fluid from it to manufacture, sell, and distribute gasoline treated with the fluid (R. 25, 102, 110). The

[7] There is a third type of license, which is of no importance in this litigation, by which appellant licenses refiners to purchase lead-treated motor fuel from other refiners and to sell it under their own brand names (R. 119–122).

[8] Although the Ethyl Corporation has adopted the practice of granting separate licenses for ethyl gasoline and regular or "Q" gasoline, these licenses are, in general, the same (R. 25, 101–129). Unless otherwise specifically stated, the discussion of refiners' licenses and jobbers' licenses is applicable to both the licenses covering ethyl gasoline and the licenses covering regular gasoline.

licenses expressly limit the classes of persons to whom such motor fuel may be sold to the following: (1) other refiners licensed by Ethyl Corporation; (2) jobbers licensed by Ethyl Corporation; and (3) retail dealers and consumers (R. 102, 110). The refiners agree that upon notice of the cancellation of a license held by any other refiner or jobber the refiners will discontinue deliveries of the gasoline containing the patented fluid to refiner or jobber (R. 102, 115). The appellant agrees to sell the patented fluid at $9.841 per gallon, which is the equivalent of 26/100 of a cent per cubic centimeter (R.10, 111).

The mixing of the fluid with gasoline is required to be done at the refineries of the buyers and the equipment used for this purpose must meet the approval of appellant (R. 103, 111). In the handling and mixing process, the refiners agree to abide by the regulations promulgated by the Surgeon General of the United States and by any other regulations issued by any governmental body having jurisdiction. The refiners agree to impose similar obligations on all purchasers of the treated gasoline and to require the purchaser to impose like obligations on those to whom they sell. (R. 103, 111–112.) Representatives of appellant are given free access to the premises of the refiners and the right to make physical examinations of refinery employees (R. 103–104, 112).

Under the licenses covering the manufacture of

ethyl gasoline, the refiners agree to sell ethyl gasoline to their various classes of customers at certain fixed differentials above the average net sale price of the refiners' best nonpremium grade of commercial gasoline (R. 110). The licenses covering the manufacture of regular gasoline provide that gasoline manufactured under such licenses shall be the refiners' best nonpremium grade gasoline and shall be sold as the next highest-priced motor fuel below the refiners' ethyl gasoline (R. 102).

The license covering the manufacture of regular gasoline requires that the fuel produced thereunder shall have an octane rating not in excess of 70 (R. 25, 104). The license covering the manufacture of ethyl gasoline requires that such gasoline shall meet the standard as fixed by appellant—at present a minimum octane rating of 76 (R. 25, 113). Both licenses contain minimum standards for gasoline which is to be treated with the fluid (R. 104–105, 113). It is provided that the maximum amount of fluid to be added per gallon of gasoline shall be three cubic centimeters (R. 105, 114).

The license covering regular gasoline expressly forbids the refiner to use the name of the Ethyl Corporation, its trade-mark, or the trade names "Ethyl" and "Q" in connection with the advertising and sale of regular gasoline (R. 105). With one exception the licenses covering ethyl gasoline expressly require the refiners to use the word

"Ethyl" as a part of the brand name and to use the trade-mark and name of the Ethyl Corporation in connection therewith (R. 115).[9]

Ethyl gasoline constitutes only about 6 percent of the gasoline treated with the patented fluid; approximately 94 percent of gasoline so treated is regular gasoline (R. 26).

(b) *Jobber licenses.*—Jobbers desiring licenses are generally required by the Ethyl Corporation to submit their applications through the refiners from whom they expect to purchase (R. 27). The licenses issued to jobbers purport to grant the right to sell and deliver to retail dealers and consumers within a specified territory gasoline treated with the patented fluid by a licensed refiner (R. 125, 128). The jobbers are required to furnish appellant with a list, revised monthly, of all points at which motor fuel delivered under the licenses is sold. The jobbers agree to acquaint themselves with all health regulations relating to handling motor fuel containing fluid issued by the Surgeon General or any governmental agency; to post and distribute any notice dealing with the handling of such fuel; to permit physical examination of employees; and to require customers purchasing for resale to assume similar obligations. (R. 125, 128.) Adulteration of motor fuel distributed pursuant to

[9] The exception is the license issued to Standard Oil Company (New Jersey) which permits that company to market ethyl gasoline under the trade name "Esso" (R. 40).

the licenses is forbidden (R. 125, 128). Restrictions similar to those contained in the refiner licenses are imposed as to use of the Ethyl Corporation's name, trade-marks, and trade names in connection with the advertising and sale of ethyl gasoline and regular gasoline (R. 126, 128). The Ethyl Corporation retains the right to cancel the licenses issued to jobbers at any time for failure to comply with the terms thereof and either party may cancel, with or without cause, on thirty days' written notice (R. 126, 129).

6. *The Practical Operation of the Licensing System.*—The licensing plan gives appellant power to exercise control over practically the entire business of jobbing motor fuel. As pointed out above, 123 refiners (including every major oil company but one), who refine 88 percent of all gasoline sold in this country, have entered into license agreements with the Ethyl Corporation (R. 26). Gasoline processed by these refiners pursuant to the license agreements accounts for 70 percent of all gasoline sold in the United States and for 85 percent of all gasoline processed to obtain a high octane rating (R. 23). The one major oil company, Sun Oil Company, which does not hold a license to use the patented fluid, does not generally do business through jobbers (R. 23). Anyone in the United States desiring to handle lead-treated gasoline as a jobber must apply to the Ethyl Corporation for a license, since the license is a prerequisite to being able to purchase from licensed refiners.

Furthermore, the mere acquisition of the license does not end the actual and potential control exercised over the jobber's business and existence. The license is subject to immediate termination for failure to comply with the terms and restrictions imposed, and may be cancelled without cause on thirty days' written notice (R. 39, 126, 129). Each time a jobber who is selling under a refiner's brand changes his source of supply he is required to apply to appellant for a new license (R. 38).[10]

(a) *Use of the licenses to exclude jobbers from the market and to control marketing policies.*—In practice the licensing scheme has not only served to exclude jobbers from the market but has afforded a means of exercising supervision over the conduct of their business. Although approximately 11,000 of the 12,000 jobbers doing business in this country are licensed by the Ethyl Corporation, numerous applications for jobber licenses have been denied (R. 27, 37). Usually no records have been made or preserved which disclose the reason for denying applications for jobber licenses (R. 35–36). The greatest number of applicants who were denied licenses were turned down because field representatives of the Ethyl Corporation reported adversely on the "business ethics" of the applicant, the term "business ethics" being used to denote compliance

[10] The Ethyl Corporation has usually required that each jobber licensee purchase all his requirements of Ethyl gasoline from a single refiner of his own selection (R. 39).

with the marketing policies and prevailing prices in the petroleum industry (R. 36). The marketing policies and prevailing prices referred to are the marketing policies and posted retail gasoline prices adopted by the major oil companies or the market leaders among them (R. 37). Thus the Ethyl Corporation, through its separate agreements with 123 refiners, served to prevent persons from engaging in the marketing of gasoline as jobbers if investigation disclosed that such persons were likely to disregard the marketing policies and prevailing prices of the major refiners (R. 60).

(b) *The use of the licenses to maintain and control resale prices.*—In fact, the licensing scheme was actually operated for a much more far-reaching purpose than the mere exclusion of jobbers from the market. The court below was satisfied that the evidence as to the exclusion of jobbers amply supported the government's prayer for relief. Consequently it found it unnecessary to decide whether the exclusion of potential price cutters was part of a broader scheme to fix prices of gasoline (R. 52). But the stipulated facts plainly indicate that the control exercised by the Ethyl Corporation did not end with the mere selection of satisfactory jobbers.

Since 1929 each applicant for a jobber license has been investigated by a field representative of the Ethyl Corporation (R. 35). Until January 1935 one of the questions appearing on the form report

submitted by the field representatives related to the so-called "business ethics" of the jobber applicant. Subsequently the specific question was eliminated from the form, but the findings of the field representative as to "business ethics" have continued to be reported as part of the recommendations for or against issuance of the license. In many instances an adverse finding on "business ethics" is alone sufficient ground for the denial of a jobber license. (R. 36.)

The recommendations of the field representative determine largely whether a license will be granted. Following a customary practice, the field representatives usually do not set forth their reasons for recommending against issuance of a license. Except in extraordinary circumstances, the division manager's approval of the reports of the field representatives is perfunctory in character. The officials of the Ethyl Corporation charged with reviewing the reports on jobber applicants almost invariably adopt the recommendations of the field representatives when approved by the division manager. (R. 35.)

Usually the reports, which contain no reasons for recommendations against granting licenses, are the only records made or preserved disclosing why jobber licenses have been refused (R. 35–36). The failure to include in the reports reasons for the recommendations has been caused, to a large extent, by the reluctance of the Ethyl Corporation to

preserve in its records the extent to which the maintenance of gasoline prices and marketing policies by jobbers entered into the granting of licenses (R. 35).

It is stipulated that the greatest number of applicants who have been denied jobber licenses have been turned down on the basis of adverse findings by field representatives as to "business ethics".[2] In a number of instances jobbers whose practices were previously found unsatisfactory were granted licenses after representation that the jobbers' marketing practices would be changed. In at least an equal number of instances such representations were of no avail in securing the jobber a license. (R. 36.)

The Ethyl Corporation has licensed a number of jobbers who, investigation showed, were not maintaining the prevailing prices in the industry, or whose retail outlets were not doing so. In the case of a number of jobber licensees who have not followed the marketing practices prevailing in the industry and have not maintained retail prices posted generally in the industry, the Ethyl Corporation has taken no action. Some representatives of the corporation have, from time to time, however, reported to refiners the failure of jobbers

[2] Other applicants were refused because of unsatisfactory equipment, bad reputation in the local community, previous record for misbranding, adulteration, tax evasion, etc. (R. 37). The latter grounds were not included under "business ethics" as that term was used.

to abide by their suppliers' marketing policies and practices, and there have been sporadic instances of such representatives cooperating with refiner-suppliers to persuade jobbers to market gasoline in accordance with the suppliers' marketing practices. (R. 38.)

No statement or instructions have been issued to the effect that jobber licenses would be cancelled for failure to abide by the marketing practices and prevailing prices of the major oil companies, and jobber licenses have not been cancelled for this reason (R. 37, 39). It is stipulated, however, that testimony of witnesses for the government would tend to establish that a large number of refiners and a majority of jobbers believe that a jobber must maintain "business ethics" in order to obtain a license, and that a number of jobbers believe that jobber licensees are required to maintain the prices and abide by the marketing practices and policies of the major oil companies (R. 37). The effect of this belief is increased by the fact that jobber licenses may be cancelled without cause on thirty days' written notice (R. 39). Furthermore, the Ethyl Corporation investigates the operations of jobber licensees to determine the method of securing supplies; pump markings; facilities of bulk plant and nature of other physical equipment; number, character, and appearance of outlets; sales efforts; and, significantly, whether the licensees are maintaining the marketing poli-

cies, practices, and prices prevailing in the industry (R. 38).

In its supplementary instructions to field representatives issued in 1932, the Ethyl Corporation stated, "We have through these supplementary investigations been able to correct the ethyl-marketing picture to a considerable extent and have succeeded in eliminating from our jobber lists some of our former accounts who were not a credit to us as licensees of the Ethyl Gasoline Corporation" (R. 36, 183). From this statement it is apparent that the investigation of licensed jobbers conducted by the representatives of the Ethyl Corporation afforded a satisfactory means of correcting "the Ethyl marketing picture" regardless of the degree of coercion actually applied. When coupled with the scheme of selecting jobber licensees this policing system is patently a plan designed to enforce compliance by jobber licensees with the marketing practices and prevailing prices adopted by the major oil companies.

7. *Asserted Justifications of Appellant's Licensing System.*—In its brief appellant develops at some length facts which it contends demonstrate the necessity and reasonableness of its licensing system.[12] Many of these facts seem wholly irrelevant. Those which are reasonably germane to the issues may be summarized as follows:

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[12] Thus appellant asserts at one point that the licensing system resulted from the "need for encouraging the manufacture of automobiles with high-compression engines"

(a) *The alleged necessity for enforcing health and safety regulations.*—In considering this branch of the case, it is necessary to bear in mind that the license provisions, so far as they regulate jobbers, relate to the handling of gasoline containing comparatively minute quantities of the patented fluid and not to the handling of the patented fluid itself. This distinction is important because any health problem which exists is confined to the patented fluid and does not relate to the motor fuel manufactured therewith.

Soon after the patented fluid began to be used commercially in motor fuel, several serious cases of lead poisoning occurred in the manufacture of the patented fluid (R. 27). Interested parties sought

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(appellant's brief, pp. 12, 13). The facts upon which appellant relies to establish this point are completely *de hors* the record; many of them cannot be accepted at face value. For example, the discussion seems to suggest that appellant is in some measure responsible for the development of the high-compression engine. The historical fact is that high-compression motor fuel was developed to meet a need created by the existence of the high-compression engine. But even if appellant's facts are accepted, they establish no connection whatsoever between the licensing of jobbers and the manufacture of high-compression engines.

Appellant also contends that the licensing system was adopted because it wished to use the existing refining and distributing facilities of the industry (appellant's brief, p. 14). We have no quarrel with this desire; it is hardly necessary to point out, however, that the existing distribution system could easily have been used without imposing upon it the subinfeudation which the present licensing system involves.

the aid of government bodies; various groups conducted investigations and experiments (R. 27–29). This culminated in the appointment of a committee by the Surgeon General, which submitted a report to him that served as the basis for proposed regulations covering the manufacture and handling of both the patented fluid and the motor fuel treated with the fluid (R. 29–31). The Surgeon General recommended that states and municipalities should adopt the proposed regulations, but no state or municipality has adopted these or similar regulations (R. 31).

At the time, the situation was considered so serious that the sale of the patented fluid was voluntarily discontinued from May 1925 to June 1926 (R. 28). In January 1926 the committee appointed by the Surgeon General made its report, which disclosed that its investigation had unearthed no evidence of harmful effects resulting from the handling or use of motor fuel treated with the patented fluid (R. 29–31). The regulations proposed by the Surgeon General deal principally with precautions to be taken in mixing the patented fluid with gasoline (R. 31, 130–140). The only recommendations as to handling the motor fuel are that pumps and containers should carry suitable warning signs and that suitable leaflets describing possible dangers and precautions to be taken in using

ethyl gasoline should be available at all filling stations (R. 135, 140).[13]

No authentic cases of lead poisoning or other injury to health from gasoline containing the fluid have ever been discovered which could in any way be attributed to the presence of the fluid in such gasoline (R. 32). In the opinion of the executives and experts employed by the Ethyl Corporation, based on fourteen years of exhaustive research, gasoline containing the patented fluid is no more dangerous to health than any other gasoline when used as motor fuel (R. 32). There is absolutely no evidence that appellant's elaborate system of licensing jobbers is necessary to compel jobbers to handle gasoline in such a way as not to endanger public health.[14]

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[13] It is significant that the regulations proposed by the Surgeon General contained ten paragraphs relating to the manufacture of tetraethyl lead and its blending to make ethyl fluid, fourteen paragraphs with respect to the mixing of the patented fluid with gasoline to make motor fuel, and only three paragraphs relating to the distribution of ethyl gasoline (R. 130–135). Two of the paragraphs relating to the distribution of ethyl gasoline call for the display of signs; the other has to do with the distribution of leaflets describing precautions to be taken in the use of gasoline.

[14] Accepting all of appellant's contentions, the only precautionary step which is required to be taken in handling the motor fuel is to affix signs to the pumps (R. 135). These signs, which merely recite that the gasoline contains lead and should be used as motor fuel only (R. 141, 142), are supplied by appellant at a charge of seven cents apiece (R. 41–42). The use of the signs is doubtless a commendable precaution, but it is a fair inference from all of the

(b) *The asserted need to prevent the adulteration of motor fuel.*—Appellant also urges that the licensing system is necessary to prevent adulteration, dilution, and misbranding of motor fuel manufactured under the patents. Both the refiner and jobber licenses contain specific provisions designed to maintain the quality of gasoline treated with the patented fluid, and all licensees are obligated to impose similar restrictions on all subsequent handlers (R. 107, 114, 125, 128). In the case of regular gasoline, however, no minimum octane rating is required (R. 34). Insofar as regular gasoline, which constitutes 94 percent of all gasoline treated with the patented fluid, is concerned, dilution or adulteration has been found by appellant to occur to only a small extent (R. 26, 34). A number of instances of dilution and deterioration of ethyl gasoline sold to the public have been discovered (R. 34–35). When dilution or adulteration of regular gasoline has been discovered, it has ordinarily been necessary only to report the matter to the refiner whose gasoline was involved, in view of the refiner's interest in maintaining the quality of his product (R. 34).

THE OPINION, FINDINGS, AND DECREE OF THE COURT BELOW

The case was submitted on the agreed statement of facts and the briefs and oral arguments of coun-

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facts that the absence of the signs would create no serious health hazard of any kind.

sel. The court below filed its opinion on May 19, 1939, sustaining the government's prayer for relief (R. 43–57). After summarizing the facts, the opinion describes the complaint as charging two separate restraints: (1) a restraint upon licensed jobbers to compel them to participate in agreements or understandings to maintain resale prices, and (2) a restraint upon jobbers refused licenses who have been excluded from the market as a result of the agreements between the Ethyl Corporation and refiner licensees (R. 50). The opinion discusses the law and the facts relevant to each of the restraints charged and concludes that restraint imposed upon jobbers excluded from the market through the denial of licenses is ample justification for granting the relief sought.

In discussing the alleged restraint so far as it related to the maintenance of resale prices the court said (R. 52):

> A clear case of price maintenance thus is not made out, especially in view of the indefinite language of the stipulation. That an agreement or understanding for the maintenance of prices existed between defendants and their jobber licensees is perhaps a permissible but not a necessary conclusion from the stipulated facts. As the case can be disposed of on other grounds, it is unnecessary to pass upon this issue.

In reaching this conclusion the court was influenced by the fact that it was uncertain as to

whether the terms "marketing practices" and "marketing policies," as used in the stipulation of facts, should be construed as including "price policies." [15]

On August 14, 1939, the court entered its findings of fact, conclusions of law, and decree (R. 57–64). The findings of fact adopt and incorporate by reference the stipulation of facts (R. 57–58). In addition, certain ultimate findings of fact are included which are merely a reiteration of statements as to the facts which are contained in the opinion (R. 58–60). Likewise, the conclusions of law set forth in summary fashion the legal views expressed in the opinion (R. 60–61).

The decree perpetually enjoins the Ethyl Corporation, its officers, agents, representatives, and employees from enforcing, attempting to enforce, or including in any subsequent agreement, provisions that refiners shall sell lead-treated gasoline only to licensed jobbers; and from requiring or attempting to require jobbers to secure licenses and enforcing or attempting to enforce any outstanding jobber licenses (R. 63). Also, the jobber licenses are declared illegal, null, and void and appellant is required to notify all jobbers within sixty days that the licenses have been cancelled (R. 62–63). On

[15] We submit that taking the stipulation of facts as a whole, it is clear that the terms "marketing practices" and "marketing policies" include "price policies." This point is discussed at pages 38–39, *infra*.

the day the decree was entered a stay was granted pending the final determination of this cause on appeal (R. 64).

SUMMARY OF ARGUMENT

I

Appellant, through the use of its licensing system, has combined with 123 refiners producing all of the lead-treated gasoline sold in the United States to exclude from the business of handling such gasoline all jobbers except those licensed by the appellant. It is conceded that appellant has, in the exercise of its uncontrolled discretion, excluded jobbers from the market and has fixed the terms and conditions which must be met by those jobbers who have been given permission to enter the market. The combination restrains trade because it empowers appellant to decide who shall be allowed to enter the market and on what terms and conditions the permission to do so shall be granted. *Paramount Famous Pictures Corp.* v. *United States*, 282 U. S. 30; *United States* v. *First Nat. Pictures, Inc.*, 282 U. S. 44.

Appellant's licensing system also violates the antitrust laws because its basic purpose has been to compel jobbers to maintain resale prices of gasoline. Appellant has followed the practice of denying licenses to jobbers who, in its judgment, were not likely to maintain the marketing policies and price policies of the major oil companies. It is

generally thought in the trade that jobbers who do receive licenses must comply with such policies in order to retain their licenses. Appellant, through its field representatives, investigates the marketing practices of jobbers whom it licenses and admits that in this manner it has been able "to correct the Ethyl marketing picture to a considerable extent." Thus appellant has used the licensing system to exert direct, substantial, and extraordinary influence over the price policies of the individual jobbers. This kind of arrangement is clearly illegal under the antitrust laws and appellant makes no argument otherwise.

II

Appellant concedes, in effect, that its licensing system must be justified on the basis of its ownership of patents. However, an analysis of appellant's business demonstrates that appellant is not entitled to assume complete control over the marketing of lead-treated gasoline through the use of its patents. Appellant's business is the manufacturing of the patented fluid which is used in the production of such motor fuel. When it sells the fluid to the refiners it receives all the pecuniary reward which it seeks for the exploitation of its patent rights. Having thus chosen to obtain the reward for its invention through the manufacture and sale of the fluid, appellant has no right to control the marketing by its customers of motor fuel

containing the fluid. *Adams* v. *Burke*, 17 Wall. 453; *Hobbie* v. *Jennison*, 149 U. S. 355.

Appellant seeks to avoid the consequences flowing from the fact that it sold the patented article by relying upon other patents purporting to cover the mixing of the fluid with gasoline and the use of the motor fuel thus produced. The appellant is not attempting to obtain any financial return from the mixing and use patents. It is attempting to use them solely for the purpose of dominating the marketing of lead-treated gasoline in the United States. This is an improper use of the patent privilege. The rule is well established that a patentee cannot extend his control over subject matter which lies outside of the patent privilege by merely including such subject matter in his patent claims. *Carbice Corp.* v. *Am. Patents Corp.*, 283 U. S. 27; *Leitch Mfg. Co.* v. *Barber Co.*, 302 U. S. 458. By attempting to subdivide the privileges flowing from its invention into patents covering the product, the process, and the use, and by asserting the right to license under each type of patent, appellant has sought to dominate an entire industry. The licensing system gives appellant a potential power for evil over an entire industry; it is beyond the scope and the purpose of the patent laws and is void because, if sustained, it would be gravely injurious to the public interest. *Motion Picture Co.* v. *Universal Film Co.*,

243 U. S. 502, 518–519. Having thus developed under the guise of its patents a licensing system which has been used for an improper purpose appellant cannot assert the patent privilege as justifying any kind of licensing system.

III

Assuming, *arguendo,* that the reasonableness of the restrictions imposed by appellant is open for consideration, those restrictions cannot be justified as an exercise of the patent privilege. A patentee is entitled only to impose such restrictions in connection with the sale of a patented article as are normally and reasonably adapted to secure pecuniary reward for the patentee's monopoly. *United States* v. *General Electric Co.,* 272 U. S. 476. Restrictions imposed under this rule must be tested by an objective standard of reasonableness. The restrictions imposed by appellant do not meet this test.

Appellant attempts to justify its licensing system on the basis of the restrictions purporting to relate to the protection of public health. While there are dangers involved in the handling of the patented fluid, there is no hazard in handling motor fuel which contains minute quantities of such fluid. Since the jobbers handle only the motor fuel, the licensing system is clearly unnecessary for their protection or the protection of their customers. Appellant's own course of conduct shows

that protection of the public health is not the real reason for the licensing scheme. It is not to be assumed that refiners and jobbers are not as zealous to protect the public health as is appellant or that they would behave in a reckless or improper manner in the absence of the licensing scheme.

Appellant also suggests that the licensing system is necessary to prevent the dilution, adulteration, and deterioration of motor fuel containing the fluid which appellant sells. On appellant's own showing this argument is applicable only to ethyl gasoline, which constitutes about 6 percent of all lead-treated motor fuel. Furthermore, the product which appellant fears may be adulterated is in reality the product of the refiners. Obviously, the refiners are the ones who have a direct interest in maintaining the quality of this product and appellant's interest is too remote to justify its licensing system.

The suggestion is made that appellant's ownership of certain trade-marks may have some bearing upon its right to maintain the licensing system. This argument applies to only 6 percent of the lead-treated motor fuel because licensees are prohibited from using the trade-mark in connection with regular gasoline. The validity of appellant's trade-mark is highly questionable. In any event, the privileges flowing from the ownership of the trade-mark can be no greater than those covered by appellant's patents.

Insofar as appellant seeks to justify its licensing system on the ground that it is necessary for it to maintain resale prices of motor fuel, appellant is seeking justification from the very facts which make its scheme illegal. Appellant cannot bring itself within the rule announced in *United States* v. *General Electric Corp.*, 272 U. S. 476, because it does not manufacture the product upon which it seeks to fix the price. The price of the motor fuel has no substantial relationship to appellant's financial return from its patent monopoly. Appellant's patents do not entitle it to combine with others to boycott and to exclude from the market all persons who do not accept appellant's economic theories as to the undesirability of price competition.

IV

In striking down the entire jobber licensing scheme the court below granted the only effective relief which could be given. No other decree would suffice to assure jobbers that they were completely free of domination and free to engage in the competition which is protected by the antitrust laws. A decree which permitted appellant to retain the licensing system in any form would invite abuses through secrecy and concealment. The government should not be required continually to police a licensing plan which presents inherent opportunities for misuse.

ARGUMENT

I

APPELLANT'S LICENSING PLAN DIRECTLY AND SUBSTANTIALLY RESTRAINS TRADE

A. THE LICENSING PLAN EXCLUDES JOBBERS FROM THE MARKET UNLESS THEY ACCEPT THE TERMS AND CONDITIONS DICTATED BY APPELLANT—

Appellant's licensing system consists in part of a series of separate agreements between the appellant and 123 refiners. By the agreements the refiners agree not to sell lead-treated gasoline to any jobber who has not previously been approved by appellant. These 123 refiners produce all of the lead-treated gasoline produced and sold in the United States, and 88 percent of all gasoline (R. 26). As has been pointed out earlier in this brief, approximately 85 percent of all of the high octane gasoline sold in the United States is lead-treated and 70 percent of all gasoline is lead-treated (R. 23).

It is admitted that the appellant has denied numerous applications for jobber licenses. The effect of each of these denials was to exclude the applicant absolutely from handling lead-treated gasoline and seriously and substantially to limit his opportunity to deal in any kind of high octane gasoline. Those persons who are now acting as jobbers in the sale of lead-treated gasoline are able to do so only because appellant has granted them permission. Appellant, in the exercise of its uncontrolled discretion, has fixed the terms and conditions which

must be met before this permission is granted. It reserves the right to withdraw its permission without cause at any time upon thirty days' written notice (R. 39).

The court below held that this series of agreements "clearly is in restraint of trade" (R. 52). We submit that this conclusion is correct.

At points in its argument appellant attempts to create the impression that the number of exclusions from the market has been small. But this aspect of the case cannot be disposed of by resort to the doctrine of *de minimis*. In the stipulation appellant admits that it has denied "numerous applications for jobber licenses" (R. 27).[16] In any event the number of persons denied access to the market is not controlling on the question of whether appellant's scheme directly and substantially restrains trade. If appellant had, contrary to the fact, admitted every applicant to the market, the scheme would nevertheless be in restraint of trade because it has the effect of empowering ap-

[16] There is evidence that there are approximately 12,000 jobbers of gasoline in the United States (R. 25) and that 11,000 of them have been granted licenses by appellant (R. 27). It does not follow, as appellant suggests, that only a fraction of one thousand persons has been excluded from the market. There is no evidence as to the number of persons who wished to enter the jobbing business but have not done so because they were denied licenses.

pellant to decide who shall enter the market and on what terms and conditions he shall be permitted to do so. *Paramount Famous Pictures Corp.* v. *United States*, 282 U. S. 30; *United States* v. *First Nat. Pictures, Inc.*, 282 U. S. 44.[17]

If this series of agreements between appellant and the refiners is regarded merely as an exercise by appellant of its ordinary power to contract, the combination is illegal under the antitrust laws. The effect of the series of agreements is to provide for concerted action by appellant and the 123

[17] In *United States* v. *First Nat. Pictures, Inc.*, 282 U. S. 44, ten motion picture corporations, which controlled 60 percent of the business of supplying motion-picture films, agreed among themselves upon a standard form of licensing contract for dealing with exhibitors. Thereafter they agreed, through 32 local film boards of trade, with other distributors who controlled an additional 38 percent of the entire business of supplying motion-picture films, to establish uniform credit rules which would apply to persons who acquired by purchase or transfer motion-picture theatres and who wished to operate them. The government attacked this arrangement as a violation of the antitrust laws. The district court held (34 F. (2d) at p. 818) that the arrangement was not illegal, pointing out in its opinion that no exhibitor had complained and that no injury to individual traders had been shown. Nevertheless, this Court held that the arrangement restrained trade and violated the Sherman Act. It is apparent from the record and briefs in that case that the government did not rely upon actual refusals of the defendants to deal with any particular persons. That case, like this one, was a case in which the defendants had combined to prevent others from having access to the market except on terms fixed by the defendants.

refiners. It is of no consequence that concerted action has been achieved by a series of contracts rather than by a single agreement. It is likewise of no consequence that the parties to the combination may not have acted simultaneously. *Interstate Circuit* v. *United States*, 306 U. S. 208, 226–229.

As the court below pointed out, appellant through the separate agreements has "accomplished what the refiners, without the defendants' aid, could achieve only by a concerted refusal to deal with the jobbers * * *. The defendants can fare no better with their system of separate agreements than could the refiners if they formed such a combination" (R. 53). Appellant's licensing plan is an arrangement between those occupying a dominant position in an industry to deny access to the market except on their own terms. In the absence of some special justification, this Court has consistently condemned such arrangements. *Dr. Miles Medical Co.* v. *Park & Sons Co.*, 220 U. S. 373, 408; *United States* v. *Brims*, 272 U. S. 549; *Eastern States Lumber Ass'n* v. *United States*, 234 U. S. 600; *Paramount Famous Pictures Corp.* v. *United States*, 282 U. S. 30; *United States* v. *First Nat. Pictures, Inc.*, 282 U. S. 44.

B. THE LICENSING PLAN IS USED TO COMPEL JOBBERS TO COMPLY WITH THE PRICE POLICIES AND MARKETING PRACTICES OF THE MAJOR OIL COMPANIES AND THUS TO MAINTAIN RESALE PRICES

The court below disposed of the case on the ground that the licensing plan restrained trade by excluding jobbers from the market unless they

would accept the terms and conditions fixed by appellant; it found it unnecessary to decide whether the plan also restrained trade because it was used to compel jobbers to comply with the marketing practices and price policies of major oil companies (R. 52). This conclusion was plainly correct. The exclusion of jobbers from the market is a restraint of trade irrespective of whether the plan is also used to maintain resale prices. Nevertheless, the admissions made by appellant in the stipulation leave no doubt that in fact the plan was used for this latter purpose.

Appellant investigates each applicant for a license. This investigation is made by a field representative who exercises wide discretion in recommending the granting or rejection of the application. The recommendation of the field representative is largely decisive of whether a license will be issued. These field representatives are supplied with forms to use in reporting upon their investigations (R. 35). Appellant admits that probably the most important matter which the field representative investigates is the "business ethics" of the applicant. The form used for making a report of the investigation from April 1929 to January 1935 contained a specific question relating to "business ethics" (R. 36, 143). In January 1935 the form was changed so as to eliminate this question, but even after January 1935 the "business ethics" of the jobber continued to be one of the principal subjects of investigation and the findings of the

field representative with respect thereto were included in the recommendations he made as to the disposition of the application (R. 36, 144).

Appellant concedes that an adverse finding upon the "business ethics" of an applicant in many instances, quite apart from anything else, has been sufficient ground for the refusal of a license. It is even more significant that appellant admits that the greatest number of applicants who have been denied licenses were rejected on the basis of adverse findings made by the field representatives as to their "business ethics" (R. 36). Appellant's brief frankly states that appellant denies applications for licenses because the applicants are price cutters (appellant's brief, pp. 61–71). In a number of cases jobbers have been required to promise that they would change their marketing practices before licenses were granted. In other cases appellant refused to grant a license despite representations by the applicant that it was willing to change its marketing practices. (R. 36.)

It is unnecessary to speculate as to the meaning of the term "business ethics." Appellant admits that it uses those words "to denote compliance with marketing policies and prevailing prices of the petroleum industry" (R. 36). Appellant also concedes that the "marketing policies and prevailing prices" referred to are the marketing policies and posted prices "adopted by the major oil companies or the market leaders among such com-

panies" (R. 37–38).[18] To understand this definition of "business ethics" it is unnecessary to make any sharp distinction between the terms "marketing practices" and "marketing policy" on the one hand and such terms as "price policy" and "posted prices" on the other.[19] The terms "marketing policy" and "marketing practices" doubtless have a somewhat wider meaning than "price policy" and "posted prices." But that they include prices within their scope is too obvious to require argument because price is determined by all of the practices and policies which affect the market. It follows that for all practical purposes the euphemism "business ethics" is synonymous with "price policy."

The interest of appellant in the price policies of the jobbers does not cease upon the granting of a license. Supplementary investigations of licensed jobbers are made from time to time and reports made to appellant on the same forms which are used for applications (R. 37). Appellant admits that it has investigated the operations of its jobber

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[18] In appraising these facts it is well to bear in mind that one-half of the capital stock of appellant is owned by the Standard Oil Company (New Jersey) (R. 18). This is the largest oil company operating in the United States (see *Verbatim Record of the Proceedings of the Temporary National Economic Committee*, Vol. 6, page 103, Bureau of National Affairs, Inc.).

[19] The court below apparently regarded the separate use of the terms "marketing policies," "marketing practices," and "posted prices" in the stipulation as somewhat confusing. See pages 25–26, *supra*.

licensees to determine, among other things, whether they are maintaining the marketing policies, practices, and prices prevailing in the industry (R. 38). In its *Field Representative Manual* appellant states (R. 183):

> We have through these supplementary investigations been able to correct the Ethyl marketing picture to a considerable extent and have succeeded in eliminating from our jobber lists some of our former accounts who were not a credit to us as licensees of the Ethyl Gasoline Corporation.

From time to time some of the division managers and field representatives of appellant have reported to refiners that jobbers have not been abiding by the refiners' marketing policies and practices, and there have been sporadic instances in which appellant's representatives in cooperation with refiners have persuaded jobbers to market gasoline in accordance with the refiners' marketing practices (R. 38). Appellant's power of persuasion in this respect should be judged in the light of the fact that a jobber's license can be cancelled by appellant without cause, upon thirty days' notice (R. 39). In a few instances appellant has gone so far as to refuse a new license to a jobber who wished to change his source of supply because he had not maintained the policies, practices, and prices of the major oil companies or the market leaders among them (R. 39).

The facts which have just been summarized establish beyond any doubt that appellant has used its licensing system to maintain resale prices and to control and dominate the price policy of the jobbers.[20] It is of no avail for appellant to point out that in some cases it has issued licenses to jobbers who were not abiding by the prices prevailing in the industry (R. 38). Appellant's regulation of the market may not have been applied with rigid uniformity to all applicants, but it has been deliberately applied on a wide scale. Nor is it particularly significant that, despite the existence of the licensing system, price cutting has been practiced by some licensed jobbers (R. 38). An illegal combination or conspiracy does not cease to be illegal merely because its success is not absolute and unqualified.

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[20] The court below, in its opinion, stated (R. 52):

> A clear case of price maintenance thus is not made out, especially in view of the indefinite language of the stipulation. That an agreement or understanding for the maintenance of prices existed between defendants and their jobber licensees is perhaps a permissible but not a necessary conclusion from the stipulated facts. As the case can be disposed of on other grounds, it is unnecessary to pass upon this issue.

In its findings of fact the court found (R. 60):

> The petitioner has failed to establish a clear case of price maintenance through agreement or understanding with jobbers.

We do not view this statement and finding as holding that appellant has not used its licensing system to maintain prices and to dominate and control the price policies of jobbers. We do not believe that the court below

An answer to these suggestions and to all of appellant's arguments that it has not succeeded in restraining competition is supplied when we consider the frame of mind which the appellant's methods have created in the industry. It is agreed that the evidence would tend to establish that a large number of refiners and a majority of jobbers believe that a jobber must maintain "business ethics" to obtain a license, and that a number of jobbers believe that jobber licensees are required to maintain the prices and abide by the marketing practices and policies of the major oil companies (R. 37). To create this atmosphere it has not been necessary for appellant to issue any statement that it would cancel licenses for price cutting (R. 37), or to cancel licenses for failure to maintain the policies, practices, and prices of the major oil companies (R. 39). The fact that appellant has been able to create this frame of mind without making

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intended either the statement in its opinion or the finding of fact to carry this broad implication. Both statements seem to relate to the question of whether there was an agreement between appellant and its jobbers. We submit that it is unnecessary to decide whether such an agreement existed. By combining with refiners appellant has forced the jobbers to accept its dictates if they wish to continue in business. This is not a case of agreement but of coercion. As this Court said in *Federal Trade Comm.* v. *Beech-nut Co.*, 257 U. S. 441, 455, this is "suppression of the freedom of competition by methods in which the company secures the cooperation of its distributors and customers, which are quite as effectual as agreements express or implied intended to accomplish the same purpose."

public announcements and without actually cancelling licenses is persuasive evidence of the efficacy of the means it has devised to dominate the market. The tactics which appellant follows in passing upon applications for licenses, in continually supervising and inspecting the activities of its licensees, and in passing upon applications for new licenses made by jobbers who wish to change their source of supply are more than adequate; it is unnecessary to resort to blunt warnings, to crude threats, or to punitive cancellations.

So long as jobbers are in this frame of mind and so long as appellant retains its power to cancel their licenses without cause and thus to deprive them of access to the market, it possesses an effective instrument for suppressing competition. The fact that a majority of jobbers believe that active competition in the market will lead to cancellation of the license proves the efficacy of the instrument. Its force is not impaired, or its existence denied, by the fact that appellant may forbear to use it.

The real purpose of the licensing plan is also indicated by the extraordinary lengths to which appellant has gone to conceal its desire to maintain prices and control price policy. The field representatives of the company have usually not set forth in writing their reasons for recommending against the issuance of licenses. It is admitted that to a great extent this is the result of the reluctance of appellant to preserve in its records evidence as

to the extent to which marketing policies and the maintenance of gasoline prices are taken into account in granting licenses (R. 35). It is also significant that appellant admits that the amount of reliance placed by appellant on the "business ethics" of jobbers has "normally not been disclosed" in its records and communications (R. 36). Finally, it should be noted that appellant caused the question relating to "business ethics" to be eliminated from the form of jobber report in January 1935, although it is stipulated that at all times since that date the "business ethics" of the jobbers have been the principal object of appellant's interest (R. 36).

Light is thrown on the real purpose of the licensing plan by Point II of appellant's brief, which attempts to justify appellant's admitted refusal to license jobbers who do not comply with the price policies of the major oil companies. The argument displays a reluctance to accept the consequences of a free market. Appellant assumes that price competition beyond the limits thought by appellant to be reasonable is dangerous and antisocial, and it characterizes such competition and those who engage in it by condemnatory adjectives. Thus, there are references to traders who "undermine" the market (appellant's brief, p. 65); to commodities which are used as "price footballs" (*id.* at 66); to "industrial piracy" (*id.* at 68); to "indiscriminate price cutting" (*id.* at 69); to "notorious

price cutters" (*id.* at 71); and to those who "depress the prevailing retail price" and thus "create suspicion and ill will" (*id.* at 67). It is a fair inference from the whole tenor of this argument that appellant is more keenly aware of the vices of price competition than of its virtues and that in good faith it believes that its patents give it the right to determine how much and what kind of price competition is desirable in the distribution and sale of gasoline.

Inasmuch as appellant admittedly acts on these principles in excluding jobbers from the market, it can hardly be doubted that similar motives color the administration of other aspects of its licensing system. Certainly the economic considerations which appellant urges with such earnestness in defense of its denial of licenses to price cutters, if valid, apply with equal force to its relations with its licensees. If it is important for appellant to exclude from the market persons likely to engage in undesirable price competition, it is equally desirable, from appellant's point of view, to prevent such price competition by existing jobber licensees. Appellant's own brief betrays a desire to restrain and limit price competition. The licensing system enables appellant, by acting in concert with 123 refiners, to translate that desire into effective action.

This kind of a combination designed to suppress and restrain price competition by the concerted action of those occupying a dominant position in the markt is clearly illegal under the antitrust laws. *Dr. Miles Medical Co.* v. *Park & Sons Co.*, 220 U. S. 373; *Eastern States Lumber Ass'n* v. *United States*, 234 U. S. 600; *Federal Trade Comm.* v. *Beech-Nut Co.*, 257 U. S. 441; *United States* v. *Trenton Potteries Co.*, 273 U. S. 392; *Interstate Circuit* v. *United States*, 306 U. S. 208. Even as a purported exercise of the patent privilege, the licensing plan is illegal if in fact it has been used to maintain resale prices, and appellant makes no serious contention otherwise. That it has been used for this purpose is established by the admitted facts.

II

APPELLANT, HAVING SOLD THE PATENTED FLUID TO THE REFINERS, CANNOT LEGALLY RESTRICT OR CONTROL THE MARKETING OF MOTOR FUEL

If the licensing system is to be defended at all, it must be defended on the basis of the special privileges which appellant insists result from its ownership of certain patents and of a trade-mark. This appellant, in effect, concedes because in attempting to justify the licensing system it relies solely upon its patents and trade-mark.

Appellant contends that by reason of its patents it is entitled to issue licenses which restrict and control the use and marketing of gasoline after it

is sold by the refiners. Appellant accordingly concludes that the only issue involved in this case is whether the restrictive conditions imposed upon the jobbers are reasonable and necessary incidents of the commercial exploitation of appellant's patent privilege. Even if the premise from which this argument proceeds is sound, the conclusion must be rejected because the jobber licenses are not necessary or proper means for the exploitation of appellant's patent privilege (see pages 70–91, *infra*). But the premise itself is unsound. Quite apart from any question of reasonableness appellant's patents give it no right to control the marketing or use of lead-treated gasoline in the hands of either the refiners or the jobbers.

This follows from the way in which appellant does business and particularly from the method it has chosen to exploit its patents. Appellant sells patented ethyl fluid to licensed refiners. It sells the patented fluid intending that it shall be mixed with gasoline and that the gasoline so treated shall be used as motor fuel (R. 23). Concededly the patented fluid has no valuable commercial use except for the manufacture of motor fuel. Appellant makes its profits solely from the sale of the patented fluid (R. 24). Although it issues licenses to refiners and to selected jobbers, it receives no royalties or license fees. Thus, appellant has chosen to exploit its patents by manufacturing the fluid covered by the patents and sell-

ing that fluid for use in the manufacture of motor fuel.[21]

The legal question which arises on these facts is this: Having chosen to exploit its patents in this particular way, can appellant sell the patented fluid and at the same time control the subsequent marketing and use of the motor fuel containing the patented fluid? We submit that the decisions of this court, and the reasoning and public policy which those decisions reflect, establish that the licensing system by which appellant attempts to accomplish this result is not within the scope of the patent privilege.

The determination of the extent of the patent privilege and the definition of the purposes for which it may be used is a task which the courts always carry out in the light of considerations of legislative policy and public interest. This Court said in *Kendall et al.* v. *Winsor*, 21 How. 322 (pages 327–328):

> It is undeniably true, that the limited and temporary monopoly granted to inventors was never designed for their exclusive profit or advantage; the benefit to the public or community at large was another and doubtless the primary object in granting and securing that monopoly. This was at once

[21] In so doing appellant has chosen to retain for itself a monopoly on the important and novel element in its patents, *i. e.*, the fluid. This is discussed later in the brief. *infra* pages 55–56.

> the equivalent given by the public for benefits bestowed by the genius and meditations and skill of individuals, and the incentive to further efforts for the same important objects. The true policy and ends of the patent laws enacted under this Government are disclosed in that article of the Constitution, the source of all these laws, viz: "to promote the progress of science and the useful arts," contemplating and necessarily implying their extension, and increasing adaptation to the uses of society.

Again in *Motion Picture Co.* v. *Universal Film Co.*, 243 U. S. 502, this Court said (pages 510–511):

> Since *Pennock* v. *Dialogue*, 2 Pet. 1, was decided in 1829 this court has consistently held that the primary purpose of our patent laws is not the creation of private fortunes for the owners of patents but is "to promote the progress of science and useful arts" * * *.

These considerations of public policy are usually decisive of any case which involves the scope of the patent privilege.[22] For example, this Court has consistently limited the patent privilege by refer-

[22] The disregard of this principle leads to one fundamental misconception which underlies all of appellant's argument. Its brief insists that the extent of the patent privilege should be measured by the patentee's "reasonable business judgment." This has never been the law and to add this kind of gloss to the patent statute would be to pervert its fundamental purpose. See the discussion of this point at pages 72–73, *infra*.

ence to such broad considerations of policy as the reluctance of the law to encourage restraints on the alienation of chattels, and the public interest in the preservation and enforcement of unfettered competition and a free market. Thus this Court in familiar decisions has held that a patentee cannot sell the patented article and thereafter by purported licenses or other contractual arrangements control the use of the article (*Adams* v. *Burke*, 17 Wall. 453; *Hobbie* v. *Jennison*, 149 U. S. 355; *Keeler* v. *Standard Folding Bed Co.*, 157 U. S. 659) or the price at which the patented article shall be sold (*Bauer* v. *O'Donnell*, 229 U. S. 1; *Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490; *Boston Store* v. *American Graphophone Co.*, 246 U. S. 8). The prohibition against control after sale is absolute and unqualified and reflects the consistent policy of this Court to strike down restraints upon the alienation of chattels.[23] This Court has announced the same rule in dealing with attempts to impose restraints upon the free marketing of copyrighted articles (*Bobbs-Merrill Co.* v. *Straus*, 210 U. S. 339), and articles made by a secret formula (*Dr. Miles Medical Co.* v. *Park & Sons Co.*, 220 U. S. 373, 409).

When the patentee, instead of selling the patented article, grants a license for its use, manufac-

[23] For a statement of this policy, see *Dr. Miles Medical Co.* v. *Park & Sons Co.*, 220 U. S. 373, 404–405, and *Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490, 500–501.

ture, and sale, certain kinds of restrictive conditions are likewise invalid. Thus provisions in a license agreement by which the patentee attempts to control subject matter outside the scope of the patent privilege are unlawful, irrespective of any question of reasonableness or of the financial benefit which they may bring to the licensor. *Motion Picture Co. v. Universal Film Co.*, 243 U. S. 502; *Carbice Corp.* v. *Am. Patents Corp.*, 283 U. S. 27; *Leitch Mfg. Co.* v. *Barber Co.*, 302 U. S. 458.[24]

[24] This Court has made a distinction between a patentee who sells the patented article and thereafter attempts to control its use and a patentee who grants a license with conditions which restrict the use which may be made of the article by the licensee. See *United States* v. *General Electric Co.*, 272 U. S. 476, 489–490, 493–494.

This Court has also made a distinction between the rule to be applied when the patentee himself sells the patented article and the rule which governs when a limited licensee makes a sale in violation of some restrictive provision of his license, *e. g.*, a sale for a use not permitted by the license. See *General Talking Pictures Corp.* v. *Western Electric Co.*, 304 U. S. 175, 181, 305 U. S. 124, 127.

Certain restrictive conditions contained in license agreements may be illegal depending upon whether they are reasonable and necessary to the protection of the patentee's interests and whether they conflict with applicable statutes. Since here we are arguing that the restrictive provisions in appellant's refiner and jobber licenses are illegal quite apart from any question of reasonableness, the discussion of decisions dealing with the reasonableness of restrictive provisions is deferred to that section of the brief (*infra* pages 70–91) where it is shown that appellant's restrictive conditions are not reasonable.

A. APPELLANT'S PATENT CONTROL ENDED WITH THE SALE OF THE PATENTED FLUID.

Appellant has chosen a particular method of exploiting its patent rights. It manufactures and sells the patented fluid. When it receives the price for the fluid it has received all of the financial reward which it collects or claims from the exploitation of its patent rights. Having made this choice, appellant is subject to the fundamental rule laid down by this Court in *Adams* v. *Burke*, 17 Wall. 453, and thereafter frequently applied. The Court there said (page 456):

> But, in the essential nature of things, when the patentee, or the person having his rights, sells a machine or instrument whose sole value is in its use, he receives the consideration for its use and he parts with the right to restrict that use. The article, in the language of the court, passes without the limit of the monopoly. *Bloomer* v. *McQuewan*, 14 Howard, 549; *Mitchell* v. *Hawley*, 16 Wallace, 544. That is to say, the patentee or his assignee having in the act of sale received all the royalty or consideration which he claims for the use of his invention in that particular machine or instrument, it is open to the use of the purchaser without further restriction on account of the monopoly of the patentees.

In that case the plaintiff's predecessor in interest had assigned to a coffin manufacturer all of his

rights in a patent which covered the making, use, and vending of coffin lids, but the assignment was limited to an area within a radius of 10 miles around Boston. The assignee made and sold a coffin lid within the area to the defendant who used the coffin lid outside the area. The plaintiff sued the defendant for infringement of the patent. The Court held that a plea setting up the facts as to the sale was good and that the suit should be dismissed.

In *Hobbie* v. *Jennison,* 149 U. S. 355, the assignee of a patent for the State of Michigan, made and sold the patented articles in Michigan to a person who he knew intended to use them in the State of Connecticut. The plaintiff, the owner of the patent for the State of Connecticut, sued the defendant for infringement. This Court held that the knowledge of the defendant was immaterial and that he could not be sued for infringement.

In each of these cases, this Court regarded the sale as destroying the privilege of the patentee thereafter to control the use of the patented article. The importance which this Court attached to the act of sale is emphasized if we consider the terms of the assignment made in each case. Under the assignment, the assignee had the right to make, vend, and use the patented article within the prescribed territory. He clearly had no personal right to use the patented article outside the prescribed area. Nevertheless, this Court held that by

the mere act of sale, he created in the vendee a right of use which the assignee himself never possessed.

These cases clearly establish that once a patented article is sold the patentee's power of control is gone. That is what occurs in the case at bar when appellant sells its patented fluid to refiners. At that point, appellant has received all of the pecuniary reward which it seeks for the use of its patents. Appellant suggests that if it can control the use and marketing of motor fuel made with the patented fluid, it may thereby receive some indirect financial benefit. Even if we indulge in this assumption, the law does not permit control after sale, or recognize indirect financial benefits resulting from that control as falling within the scope of the patent privilege. In every case where the patentee attempts to control the use of the patented article after sale, he doubtless does so because he believes that some pecuniary advantage will result. But this Court has never permitted the patent privilege to be extended by reliance upon the expectation of such indirect financial benefits.[25] Appellant having sold its patented product at a price

[25] In a case where the patentee seeks to control the resale price of patented articles which he has sold, it is obvious that the financial benefits which he expects may be direct and substantial. Nevertheless, this Court does not permit the expectation of those benefits to nullify the legal effect of the initial sale. See *Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490; *Bauer* v. *O'Donnell*, 229 U. S. 1.

satisfactory to itself, "the public is entitled to whatever advantage may be derived from competition in the subsequent traffic." *Dr. Miles Medical Co. v. Park & Sons Co.*, 220 U. S. 373, 409.

By the act of sale, appellant exploited its patents and received its financial reward; it cannot justify its attempts to control the subsequent use and marketing of motor fuel by reliance upon its patent privilege. Appellant apparently recognizes the necessity of avoiding the application of this rule. It seeks to do so by pointing to its so-called "product or mixing" patent and to its so-called "process or use" patent, and by suggesting that even though it has sold the patented fluid, it retains, by reason of these patents, the power to control the subsequent use and marketing of motor fuel. To appraise this argument, it is desirable to refer briefly to the claims contained in these patents.

A typical claim of the mixing patent is for "A fuel for internal-combustion engines comprising a low compression motor fuel, and an oil-soluble volatile compound of a metal adapted to increase the critical compression pressure of the motor fuel" (R. 77, Claim 2). A typical claim of the use patent reads as follows: "A method of utilizing a low compression motor fuel which comprises forming a combustible mixture of the fuel and air, and burning the mixture under a relatively high compression in the presence of vapors of a compounded metallic element" (R. 84, Claim 1).

It is unnecessary to discuss the validity or even the value of these patents. If they contain any fundamental novelty, it relates solely to the use of the patented fluid. Whatever commercial value these patents may have arises from the use of the patented fluid. This is shown by appellant's method of doing business. It gets no direct financial return whatsoever from the mixing and use patents. So long as it remains in the business of manufacturing and selling the patented fluid it can hardly expect to collect any income from purchasers of the fluid by reliance upon the mixing and use patents; the fluid being useful only for the manufacture of motor fuel, no market for it would exist unless the purchasers were assured that they could use it for the only purpose it will serve.

Appellant suggests in its brief that it is necessary for it to license jobbers under the mixing and use patents because otherwise they would not be authorized to handle lead-treated gasoline, and their handling and sale of such gasoline would be an infringement of those patents. As an excuse for licensing jobbers this suggestion is without substance. Since the patented fluid can be used only for the manufacture of motor fuels, and since it is sold to the refiners for that purpose and with the intention that it shall be so used, that sale would carry with it the implied right, on the part of the refiners, to manufacture and sell motor fuel without an express license under the mixing and use pat-

ents. The sale of the motor fuel by the refiners to the jobbers would likewise carry with it the right to use and sell the motor fuel without an express license under the mixing and use patents. See *Leitch Mfg. Co.* v. *Barber Co.*, 302 U. S. 458, 461; *Radio Corporation of America* v. *Andrea*, 79 F. (2d) 626, 629 (C. C. A. 2d); and *Edison Electric Light Co.* v. *Peninsula Light, Power & H. Co.*, 101 Fed. 831, 836–837 (C. C. A. 6th). The asserted necessity for issuing royalty-free licenses to jobbers arises not because of the requirements of the patent law but because appellant is attempting by this method to extend and enforce its patent privilege far beyond the proper limits.

When appellant sells the patented fluid it sells the important element it has contributed to the art. When it receives the purchase price it has, to paraphrase the words of this Court in *Adams* v. *Burke*, 17 Wall. 453, 456, received all the royalty or consideration which it claims for the use of its invention. The value of the so-called "mixing and use" patents consists entirely in their potency as instruments for controlling the subsequent use and marketing of motor fuel. The use of the patent privilege for this purpose is improper and contrary to the principles which this Court has consistently applied to reconcile that privilege with broad considerations of public policy.

It is of no consequence that appellant has sought to obscure the real effect of the transaction here

involved by reliance upon the mixing and use patents and by resort to so-called "license agreements." This Court will "look through the words and forms," with which the appellant "has most elaborately enveloped its purpose, to the substance and realities of the transaction." *Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490, 498.[26] In that case the execution of "license agreements", the description of the consideration for the transfer of a patented article as a "royalty" rather than as "purchase price", and the use of "license notices" specifying the terms on which the patented article might be used did not prevent this Court from penetrating to the substance of the transaction and holding it to be a sale and not a license.

B. THE JOBBER LICENSES ARE UNENFORCEABLE BECAUSE THEY ARE AN ATTEMPT TO CONTROL SUBJECT MATTER WHICH LIES OUTSIDE THE SCOPE OF THE PATENT PRIVILEGE

Appellant assumes that the legality of its licensing scheme must be measured by the rules applicable to patent licensing arrangements rather than by the rules applying to sales of patented articles. This assumption is erroneous; we have shown above that under the decisions of this Court when appellant sells the patented fluid it receives the full pe-

[26] This Court there said (243 U. S., at pages 500–501):

> Courts would be perversely blind if they failed to look through such an attempt as this "License Notice" thus plainly is to sell property for a full price, and yet to place restraints upon its further alienation, such as have been hateful to the law from Lord Coke's day to ours, because obnoxious to the public interest.

cuniary consideration for the exploitation of its patent rights and its patent privilege is exhausted. But even if we apply the rules relating to licensing agreements, appellant cannot prevail in this cause. The decisions of this Court which prescribe the nature of the restrictive provisions which may properly be put in such agreements establish the illegality of appellant's conduct.

If the gasoline whose use and sale appellant seeks to control by its mixing and use patents possesses any patentable peculiarity, that characteristic results from the presence in the gasoline of an infinitesimally small portion of the patented fluid which the appellant has voluntarily sold for a valuable consideration. The control which the appellant attempts to exert over the marketing of this gasoline is not casual or intermittent. It is deliberate and detailed and is contrived to subject to appellant's dictation the marketing of 85 per cent of all high grade gasoline sold in the United States. This employment of the mixing and use patents runs afoul of the well-settled rule that the patent privilege cannot be used to maintain or establish the patentee's control over subject matter which lies outside the legal scope of that privilege, even though included within the claims made in the patent. *Motion Picture Co.* v. *Universal Film Co.*, 243 U. S. 502; *Carbice Corp.* v. *Am. Patents Corp.*, 283 U. S. 27; *Leitch Mfg. Co.* v. *Barber Co.*, 302 U. S. 458; *American Lecithin Co.* v. *Warfield Co.*, 105 F. (2d) 207 (C. C. A. 7th); *Philad*

Co. v. *Lechler Laboratories, Inc.*, 107 F. (2d) 747 (C. C. A. 2nd), certiorari denied November 13, 1939, 60 S. Ct. 175; *Slayter & Co.* v. *Stebbins-Anderson Co., Inc., et al.*, Civil No. 21, United States District Court for the District of Maryland, decided January 1940 (unreported).

Appellant tries to distinguish these cases by pointing out that they involved attempts by the patentee to control unpatented materials, and by arguing that since appellant has patents on both the fuel and the fluid, it is not attempting to control the use of an unpatented material. This argument takes too narrow a view of the basic rule laid down by these decisions. They establish that an attempt to use the patent privilege for an improper purpose vitiates rights which might otherwise have existed. The rule is not confined to cases in which the patentee seeks to control unpatented materials. It applies to every attempt to use a patent to obtain control over matters outside the scope of the patent privilege.

The facts in *Carbice Corp.* v. *Am. Patents Corp.*, 283 U. S. 27, are significant in this connection. In that case the American Patents Corporation and the Dry Ice Corporation, its exclusive licensee, brought suit to enjoin contributory infringement by the Carbice Company and to obtain an accounting of profits and damages. The patent relied upon covered a transportation package consisting of a protective casing of insulating material having packed therein a quantity of

frozen carbon dioxide in an insulated container and a quantity of freezable product in proximity to the frozen carbon dioxide. The sole business of the Dry Ice Corporation was the manufacture of solid carbon dioxide, which was not a patentable article. It did not issue to others licenses to use the package covered by the patent upon payment of a royalty. The Dry Ice Corporation did not formally license purchasers of its carbon dioxide, but the Court assumed that each purchaser was granted a license by implication. The Carbice Corporation manufactured and sold carbon dioxide with knowledge that it was to be used in transportation packages covered by the patent. This Court held that the Carbice Corporation was not guilty of contributory infringement because the Dry Ice Corporation was attempting, without the sanction of law, to secure a limited monopoly of unpatented material used in applying the invention.

The decision establishes the broad proposition that if a patentee attempts to use his patent for an improper purpose, he cannot, to effectuate that purpose, sue persons for infringement who in the absence of the improper purpose might be liable. The decision has recently been so construed by the Circuit Court of Appeals for the Seventh Circuit. *American Lecithin Co.* v. *Warfield Co.*, 105 F. (2d) 207.[27]

[27] This case involved a suit for direct infringement of a method patent covering the use of lecithin (an unpatented material) in the production of chocolate. The plaintiff, the patentee, did not manufacture chocolate or issue licenses

The analogy between the *Carbice* case and the case at bar is close. Here, as in that case, appellant does not issue licenses under its mixing and use patents upon payment of a stipulated royalty. The combination patent which the Dry Ice Corporation sought to enforce was strikingly similar to the mixing patent upon which appellant relies. Both cases involve an attempt to use a patent for a collateral purpose. In the *Carbice* case the purpose was to control an unpatented commodity; in this case appellant seeks to control the greater part of the gasoline market in the United States.

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to manufacturers upon payment of a royalty. Instead, plaintiff sold lecithin to chocolate manufacturers. Anyone buying lecithin was entitled to practice the invention by implied license. The defendant, a manufacturer, was a former customer of the plaintiff. The defendant purchased lecithin from the plaintiff's competitors and used it in accordance with the method covered by the patent. The Circuit Court of Appeals held that the plaintiff could not sue for infringement because it was attempting to use the patent to suppress competition in the sale of lecithin. The Court said (page 212):

> Thus, in the instant case, it is obvious that the sole protection sought by the patentee was of a limited monopoly for its unpatented lecithin: It did not try to obtain any income from the monopoly expressly granted by the patent itself, either by practicing the patented method or by granting licenses for a royalty. For this reason, a different light is shed upon the rights of the patentee, and for this reason relief is denied the patentee. The courts are vigilant that the patent owner shall control the invention claimed in the patent and no more. The plaintiff's method of doing business had only one purpose, the doing by indirection what was prohibited directly, *i. e.*, the securing of a monopoly in the sale of lecithin, a commodity not coming within the boundaries of the patent owned by the plaintiff. This action the courts will not sanction.

The objective here is as improper as the objective in the *Carbice* case. It is significant that in the *Carbice* case the Court said that the attempt there forbidden was "analogous to the use of a patent as an instrument for restraining commerce, which was condemned under the Sherman anti-trust law, in *Standard Sanitary Mfg. Co.* v. *United States*, 226 U. S. 20." We submit that the analogy is controlling here because appellant is seeking to use its mixing or combination patent to subject to its domination every jobber in the United States who wishes to deal in lead-treated gasoline.

Appellant is in no better case if it relies upon its use or process patent. In *Leitch Mfg. Co.* v. *Barber Co.*, 302 U. S. 458, the patentee attempted to use a process patent to obtain a monopoly [of an unpatented commodity. This Court held] that the rule against this use of a patent "applies whether the patent be for a machine, a product, or a process" (302 U. S. 458, 463), and accordingly refused to permit the patentee to sue for contributory infringement.[28]

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[28] The Barber Company had a patent which covered a process for using bituminous emulsion (an unpatented article) as a film on the surface of a roadway to retard evaporation during curing. It did not engage in road building and did not seek to make road builders pay a royalty for employing the patented method. It did not grant written licenses to use the process. Any road builder, however, could buy emulsion from it, and whenever such a sale was made the law implied authority to use the invention. The Leitch Manufacturing Company sold bituminous emulsion to a road builder knowing that it was to be used in accordance with

The decision in *Motion Picture Co.* v. *Universal Film Co.*, 243 U. S. 502, is significant because it shows that the rule under discussion goes deeper than merely to prohibit the use of a patent to control unpatented materials, although that point was also involved in the case. In that case the plaintiff owned patents covering a mechanism used in motion picture exhibiting machines. The mechanism was the only one with which motion-picture films could be used successfully. The plaintiff granted a license which permitted the licensee to manufacture and sell machines embodying the invention claimed in the patents but which required the licensee to sell the machines upon condition that they be used only with films specified by the plaintiff and upon other terms to be fixed by the plaintiff. A purchaser of the patented machine used

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a method defined in the claims of the patent held by the Barber Company. The Barber Company sued the Leitch Company for contributory infringement. The Court held that there was no infringement.

It should be noted that inasmuch as the person to whom the Leitch Company sold the bituminous emulsion did not buy that commodity from the Barber Company, no license on his part to use the process could be implied. The conclusion to be drawn from the decision is that since the Barber Company had chosen to make its business the selling of bituminous emulsion, it could not use its process patent to obtain a limited monopoly of that commodity, nor could it in those circumstances use the patent to prevent others from employing the process covered by the patent. The same rule would have applied if the suit had been for direct infringement. *Motion Picture Co.* v. *Universal Film Co.*, 243 U. S. 502; *American Lecithin Co.* v. *Warfield Co.*, 105 F. (2d) 207 (C. C. A. 7th).

films not specified by the license. The plaintiff sued him for direct infringement and the person who supplied the films for contributory infringement. This Court held that the suit could not be maintained.

The case involved another point, however, which is of particular interest here. The licensee agreed to pay a royalty on each machine sold. One of the other conditions which the plaintiff imposed on purchasers from the licensee was that each purchaser should also pay an additional charge graduated by the size of the theatre in which the machine was to be used. The user of the machine refused to pay this additional charge and this act was charged as an infringement of the patent. This court held that the provision requiring the payment of the added charge was invalid, saying (243 U. S. at page 519):

> A restriction which would give to the plaintiff such a potential power for evil over an industry which must be recognized as an important element in the amusement life of the nation, under the conclusions we have stated in this opinion, is plainly void, because wholly without the scope and purpose of our patent laws and because, if sustained, it would be gravely injurious to that public interest, which we have seen is more a favorite of the law than is the promotion of private fortunes.

The restriction thus invalidated had nothing to do with unpatented materials. It was a restriction designed to permit the patentee to extend his con-

trol over the market to an extent which the Court regarded as improper. We submit that the same reasons which led this Court to strike down that restriction require the judicial destruction of appellant's licensing system. To paraphrase the language of the Court in that case, appellant's licensing system gives appellant such a potential power for evil over the industry that it is plainly void because wholly without the scope and purpose of the patent laws and because if sustained it would be gravely injurious to the public interest.

The arguments which appellant advances in defense of its licensing system, and particularly those arguments which stem from the mixing and use patents, are highly formalistic and artificial. They ignore or minimize the basic conceptions as to the scope of the patent privilege and the public interest which underlie the decisions of this Court. Appellant has made one important and novel contribution to the art, that is, the invention of the fluid for use as an ingredient in motor fuel. It has obtained not one patent on this contribution but four. It has reserved to itself a monopoly of the manufacture of the patented fluid and it derives all of its revenue from the sale of the fluid. At the same time, by an astute division of patent rights, it has attempted to control the subsequent use of that fluid and the marketing of the motor fuel in which the patented fluid is a minute ingredient. The right to exert this domination is asserted in terms which, if accepted, would justify control of the fuel not merely

in the hands of the jobbers but all of the way down the line of distribution to, and including, the ultimate consumer. Moreover, the only limitation admitted on this exercise of power is appellant's own "reasonable business judgment."

It is doubtful if any of the limitations which this Court has imposed upon the patent privilege in the interest of preserving a free market and discouraging burdensome restraints on the alienation of chattels could long survive acquiescence in appellant's argument. To evade those limitations it would only be necessary for a patentee to be astute enough in subdividing the elements of his invention and the patents relating thereto. That kind of subdivision is by no means difficult. On the contrary, the complexity of modern technological process and the ingenuity of counsel combine to make it easy. Indeed, the facility with which a variety of patents can be obtained on what is essentially a single invention is one of the frequent causes of complaint against the present state of the patent law.[29]

Having subdivided its patents, precisely as the appellant has done here, the patentee could then,

[29] See the testimony before the Temporary National Economic Committee. *Hearings before the Temporary National Economic Committee*, Part 2, *Patents, Automobile Industry and Glass Container Industry*, pages 279, 342, 369–370. One witness testified that approximately twenty-five patents had been issued on four screws which differed only as to the shape of the slot in the head (page 369).

despite a sale of the invention or of any one of its essential elements, control the marketing and use of the patented article from the factory door to the hands of the ultimate consumer. Reference to the decided cases will show how illusory the limitations upon the patent privilege would then become. For example, let us consider the facts involved in *Adams* v. *Burke*, 17 Wall. 453. In such a situation the patentee could sell the patented lid, at the same time retain a patent on the use of the patented lid with a coffin,[39] insist upon licensing all subsequent users under that patent, and thus, despite the sale, retain control of the subsequent use of the lid and the coffin.

By similar tactics it would be easy to evade the prohibition against selling the patented article and at the same time controlling the prices at which subsequent sales are to be made. This may be illustrated by considering the situation in *Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490. In such a case it would only be necessary for the manufacturer of the gramophone to obtain one patent on the machine and another patent on the process of using the machine with unpatented records to reproduce sound. (The latter patent would be closely analogous to the so-called "use" patent in this case.) Accepting appellant's arguments, the patentee could then sell the gramophone and at the same time control its subsequent use and the price at

[39] This would be similar to appellant's mixing patent.

which it might be resold by reliance upon licenses issued under the use patent.[31] If this is the law, the doctrine laid down in *Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490, has little vitality.

How far the patentee could go in extending his power over subject matter not properly within the scope of the patent privilege is shown by the facts in the instant case. Here appellant maintains a monopoly of the manufacture and sale of the patented fluid. It insists that after it has sold the patented fluid and received full compensation therefor, it can control on a nation-wide basis the subsequent marketing of the motor fuel made with the fluid. And this claim is made despite the fact that the principal ingredient of the fuel is gasoline, a commodity which lies in the public domain and over which no patent rights can be claimed by appellant or anyone else.

In effect, appellant is asking this Court to relax the restrictions which limit the exercise of the patent privilege. Modern economic and technological conditions supply no justification for this request. On the contrary, as the courts face new problems created by the complexities of the

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[31] It is assumed, of course, that the price restrictions contained in the license agreement would have to meet the test laid down in *United States* v. *General Electric Co.*, 272 U. S. 476. If we accept appellant's view that the standard to be applied in making these tests is the "reasonable business judgment" of the patentee, those tests are not likely to have a particularly astringent effect.

patent law and of modern industrial processes, the need is to tighten and to increase the restrictions on the patent privilege and not to relax them. Certainly a need exists to curtail the rights of a patentee to insert in license agreements restrictive provisions which run against the world.[32] Appellant's plea for indulgence in this case derives no substantial support from precedent, logic, or considerations of public policy. It is immaterial whether appellant is regarded as a patentee who has sold the patented article and thereby exhausted his privilege or as one who by restrictive conditions in the license agreement has attempted to extend his domination over subject matter not within the scope of the patent. On either view of the case the licensing scheme is illegal.

III

APPELLANT'S LICENSING PLAN IS NOT A REASONABLE OR PROPER EXERCISE OF THE PATENT PRIVILEGE

We have pointed out that appellant's licensing plan directly and substantially restrains trade

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[32] See the dissenting opinions in *General Talking Pictures Corp.* v. *Western Electric Co.*, 304 U. S. 175, 183–190; 305 U. S. 124, 128–133. It is significant that the Temporary National Economic Committee, which has been studying the patent problem, approved "for immediate action by Congress" certain recommendations of the Department of Justice for changes in the law which would drastically curtail the right to place restrictive provisions in license agreements. *Verbatim Record of the Proceedings of the Temporary National Economic Committee*, Vol. 4, pages 641–642 (The Bureau of National Affairs, Inc.).

(*supra* pages 33–46). In Point II we have argued that the plan cannot be justified as an exercise of the patent privilege because appellant's patent control ceases when it sells the patented fluid. If this argument is sound, no question arises as to whether appellant has abused its privilege. The licensing plan is bad because the privilege which is asserted to support it simply does not exist after the sale of the patented fluid. Appellee, however, does not rely upon this ground alone. Even if we concede for the sake of argument that the issue is, as appellant insists, abuse of power and not lack of power, appellant cannot prevail. Its licensing system is not a reasonable or proper exercise of the patent privilege. On the contrary, it is arbitrary, unreasonable, and unnecessary to the accomplishment of any legitimate object.

In *United States* v. *General Electric Co.*, 272 U. S. 476, this Court laid down the general principles which determine whether restrictive conditions contained in a license agreement are a reasonable and proper exercise of the patent privilege. In that case the Court said that the patentee can grant a license "upon any condition the performance of which is reasonably within the reward which the patentee by the grant of the patent is entitled to secure."[33] It also said that if the patentee chooses

[33] 272 U. S. at page 489. In that case this Court held that it was not a violation of the antitrust laws for the owner of basic patents on incandescent lamps which itself engaged in the manufacture and sale of lamps, to fix the price at which

to attach conditions to a license to sell the patented article, the conditions must be "normally and reasonably adapted to secure pecuniary reward for the patentee's monopoly." [34]

In attempting to meet the tests thus established by the Court, appellant proceeds under one fundamental misunderstanding which colors all of its arguments. A typical statement of this misconception is found on page 60 of appellant's brief. There, in discussing the jobber licenses, appellant asserts:

> Even assuming that the court may at all question their necessity, we submit it is an unwarranted judicial encroachment for the court to throw out the patentee's judgment and experience and substitute its own.

Apparently appellant believes that the question as to whether particular restrictive conditions are reasonably within the patent grant is one which is committed primarily to the judgment of the patentee, and that if the courts have any power of review whatsoever, their power is limited to determining whether the judgment of the patentee is so

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a licensed manufacturer could sell lamps made under the patents. In an appropriate case the government may ask this Court to reconsider its holding in the *General Electric* case in the light of modern economic and technological conditions. But in the present case the patentee's effort to control the entire marketing of motor fuel is so clearly illegal even under the *General Electric* case that there is no necessity to reconsider the doctrine there announced.

[34] 272 U. S. at page 490.

without rational foundation as to be arbitrary and capricious. The patent privilege is created in the exercise of the constitutional power to promote the progress of science and the useful arts. It is by this standard that the limits of the patent privilege must be tested. *Kendall et al.* v. *Winsor*, 21 How. 322, 327–328; *Motion Picture Co.* v. *Universal Film Co.*, 243 U. S. 502, 510–511. Appellant's argument is nothing less than an attempt to substitute for this constitutional standard the indefinite guide supplied by the enlightened self-interest of the patentee.

As an instrument for defining limitations on the scope of the patent privilege, such a guide would be illusory. There are few, if any, exercises of the patent privilege which cannot be justified as exercises of the patentee's business judgment. Indeed, if the patentee did not believe that a particular exercise of his patent was reasonable and properly within the scope of his grant, it may be assumed that he would not engage in it. To accept this subjective standard, or even to apply it to a limited or qualified extent, would eat away the restrictions which, in the public interest, this Court has placed upon the exercise of the patent privilege.

When each of the excuses which appellant offers in defense of its licensing scheme is tested by the objective standard of reasonableness which must be applied, it appears, as will now be shown, that the terms and conditions of the licensing plan are

not normally and reasonably adapted to secure objects which are within the patent privilege.

One characteristic is common to all of the reasons which appellant advances for the existence of its licensing plan. Not one of those reasons bears any direct relation to the protection of appellant's patent rights or to the pecuniary reward which appellant seeks from its patents. They relate either to the public health, which is a matter of public and not private concern, or to marketing practices in the sale of gasoline, a product which appellant does not manufacture or sell. The task which appellant has set for itself is to establish between its patent privilege and these remote and collateral objects some connection or relationship which the law will recognize. This task appellant has not performed.

A. APPELLANT'S LICENSING SCHEME CANNOT BE JUSTIFIED AS A MEASURE NECESSARY TO PROTECT PUBLIC HEALTH

Much of appellant's brief is devoted to a defense of the licensing scheme on the ground that it is necessary to protect the public against dangers which it is asserted, may arise from the handling of lead-treated gasoline. An examination of the record shows that there is no factual basis for this argument. It is true that there are hazards involved in handling the patented fluid. But the jobbers, whom appellant insists it must control in the interests of public health, handle lead-treated gasoline, not fluid. Appellant agrees that no authentic case of lead poisoning or other injury to

health from gasoline containing the fluid has ever been discovered which could in any way be attributed to the presence of the fluid (R. 32). The executives and experts employed by appellant have concluded, after 14 years of exhaustive research, that gasoline containing the patented fluid is no more dangerous to health than any other gasoline when used as motor fuel (R. 32). The committee appointed by the Surgeon General of the United States in 1925 to study the problems involved in the distribution and use of lead-treated gasoline concluded that there was no evidence of harmful effects resulting from the handling or use of motor fuel treated with the patented fluid (R. 29-30).

Appellant attempts to dismiss these facts by suggesting that the restrictive provisions in the jobber licenses have prevented health hazards from arising from the use of lead-treated gasoline. Consideration of the specific restrictive provisions which appellant insists must be enforced if public health is to be preserved shows this suggestion to be without merit. Those provisions require the jobber (1) to distribute printed material relating to the use of lead-treated gasoline (R. 125, 135, 140) and (2) to affix signs to the gasoline pumps containing lead-treated gasoline (R. 31). There is no evidence that the jobbers ever distributed any of the printed material. The signs which appellant insists are imperative if the public health is to be protected merely recite that the motor fuel

contains lead and that it should be used as motor fuel only, and not for cleaning or any other purpose (R. 141, 142). A health problem which can be effectively dealt with by the posting of such signs is wholly chimerical. Certainly this fancied danger offers no excuse for appellant's attempt to dominate and control the marketing of all lead-treated motor fuel in the United States.

That the protection of the public health is not the real reason for appellant's licensing scheme is indicated by its practices. For example, when a jobber applies for a license he is investigated by a field representative of appellant. These representatives report upon their investigations on certain forms. The form contains 22 questions exclusive of the name and address of the applicant. A number of these questions have several parts (R. 143, 144). Of the questions only two could conceivably have any relation whatsoever to the health problem and those merely require that the report indicate whether the conditions of the pump markings are good or poor. It is highly doubtful whether these questions refer to the health problem. They ask for a report on the condition of ethyl pump markings and "Q" pump markings. Since the lead-warning signs are the same for both grades of gasoline and may be used interchangeably (R. 31–32), it seems more likely that these questions are designed to elicit information as to signs which announce brand names and prices. There is no blank on the report for information as to whether the

jobber distributes printed leaflets relating to the health problem (R. 143–144).

Even more significant is appellant's so-called *"Field Representative Manual"* which instructs its field representatives as to the procedure to be followed in investigating jobbers and the retailers to whom the jobbers sell. Although there are ambiguous references in this manual to the markings on gasoline pumps, there are no detailed instructions with respect to investigating the health problem or to attempting to determine whether the signs are adequate to deal with that problem, nor is there any reference to the distribution of the printed leaflets (R. 145–187). Furthermore, the field manual contains a short statement of the history and purpose of the jobber license agreements. In this statement there is no suggestion whatsoever that appellant adopted the plan of issuing licenses to jobbers in order to enforce the health regulations or to protect the public health (R. 164–165).

However, if it is assumed that in some small measure there is a problem as to the health and safety of persons who come in contact with lead-treated motor fuel, the existence of that limited problem does not excuse the establishment by appellant of a licensing system in restraint of trade. No matter what motives may prompt appellant, the restraint must be justified within the strict limitations which have been imposed by the courts. To justify appellant's licensing system in the

name of health, nothing less than an overwhelming public necessity will suffice. No such showing has been made here. It is not to be assumed that in the absence of appellant's licensing scheme refiners, jobbers, or retailers would be so reckless and indifferent to the public health that they would fail to take whatever elementary precautions are necessary to guard against any hazards which might conceivably result from the handling of lead-treated gasoline.

B. APPELLANT CANNOT DEFEND THE LICENSING SCHEME ON THE GROUND THAT IT IS NECESSARY TO PREVENT ADULTERATION AND DILUTION OF THE MOTOR FUEL

The alleged danger of adulteration and dilution of motor fuel is no justification for appellant's licensing scheme. Dilution or adulteration of regular gasoline (which constitutes 94 percent of all motor fuel treated with patented fluid) occurs to only a small degree (R. 26, 34), but there have been instances of dilution and deterioration of ethyl gasoline sold to the public (R. 34–35).

The highly fictitious character of appellant's professed fear of dilution and adulteration is apparent from the fact that the refiner license agreements do not require the refiners to maintain any minimum octane rating so far as regular gasoline is concerned (R. 34). Both regular and ethyl gasoline are lead-treated. Whatever interest appellant has in maintaining the quality of lead-treated motor fuel must operate with as much force in the case of regular gasoline as it does in the case of ethyl. So far as quantity is concerned, the in-

terest of appellant in maintaining the quality of regular gasoline should be greater because it constitutes 94 percent of all lead-treated gasoline sold. Despite these facts, appellant apparently has so little fear of adulteration and dilution that it does not even take the elementary precautionary step of requiring refiners to maintain a minimum octane rating for regular gasoline.

In appraising appellant's arguments as to dilution, it should be remembered that appellant is engaged in the business of selling the patented fluid and that its revenue consists entirely of the proceeds of those sales. If adulteration or dilution is to affect adversely the financial interests of appellant, it must first operate through the refiners and cause them to decrease or discontinue purchases of the patented fluid. Any financial loss suffered solely by a refiner as a result of adulteration or dilution is a danger which does not concern appellant and which cannot justify its licensing system. See *Dr. Miles Medical Co. v. Park & Sons Co.*, 220 U. S. 373, 407.

The first impact of adulteration or dilution would be on the particular refiner whose gasoline had been diluted or adulterated. It may be inferred that he would be quick to take corrective steps. It is stipulated that "When dilution or adulteration of regular gasoline has been discovered, it has ordinarily been necessary only to report the matter to the refiner whose gasoline was involved, in view of the refiner's interest in maintain-

ing the quality of his product" (R. 34). No mention is made of what was done in cases of adulteration of ethyl gasoline, but it is obvious that the same remedy would be equally efficacious in such instances. Indeed, inasmuch as the ethyl gasoline is a high-priced product which must maintain a high quality if it is to keep its place in the market, the motive of the refiner for preventing and punishing adulteration and dilution may properly be assumed to be greater in the case of ethyl gasoline than in the case of regular gasoline.

Furthermore, as to both the regular and the ethyl gasoline, it is the refiner who has the direct and substantial interest in preventing dilution and adulteration. By far the greater part of the gasoline is sold under his brand name. It is his sales which will suffer and his financial returns which will be cut down if his gasoline obtains a reputation in the market for being of an inferior quality. This is particularly true because the largest ingredient of the motor fuel which the refiner sells is his own gasoline. If the gasoline acquires the reputation of being of inferior quality, this reputation is more likely to affect the refiner's reputation as a manufacturer than it is appellant. The fact that each gallon of the motor fuel contains an infinitesimal portion of the patented fluid does not dampen the desire of the refiner to maintain the high quality of his product and to prevent dilution and adulteration.

There is no evidence to support the contention that if the gasoline of a particular refiner is adulterated or diluted the necessary or probable effect would be to decrease the total sales of patented fluid by appellant. Presumably that refiner would lose part of his market to other refiners whose gasoline was not adulterated or diluted. Their purchases of the patented fluid from appellant would correspondingly increase and compensate for any decrease in the amount purchased by the refiner whose gasoline had been diluted or adulterated. At the best, appellant's financial interest in preventing adulteration and dilution is remote and the connection between that interest and the threatened danger tenuous.

C. APPELLANT CANNOT DEFEND THE LICENSING SCHEME BY RELIANCE UPON ITS TRADE-MARK

In attempting to justify its licensing system, appellant refers vaguely to rights incidental to its ownership of the trade-mark (appellant's brief, pp. 58–59). At the outset it should be noted that this claim is applicable only to the so-called "ethyl gasoline" which constitutes about 6 percent of the total lead-treated motor fuel which appellant endeavors to control by its licensing system (R. 26).

The refiner and jobber licenses issued by appellant expressly forbid the use of the trade-mark in connection with regular gasoline (94 percent of all lead-treated motor fuel) but require that the trade-mark be used in connection with all ethyl gasoline (R. 105, 115). Obviously, any need for preventing

the use of the trade-mark on regular gasoline is adequately protected by the trade-mark laws. Likewise, prevention of the use of the trade-mark on gasoline not conforming to the specifications for motor fuel to which the trade-mark is applicable can be accomplished through those same laws. Neither purpose requires the use of a licensing system and neither purpose justifies the licensing scheme devised by appellant.

In so far as the small amount of allegedly trade-marked gasoline is involved in this suit, appellant has sought to compel the licensees to affix the trade-mark to that gasoline. Having thus forced the trade-mark upon the licensees, appellant now asserts the right to protect that trade-mark by the very means used to coerce its use. Thus the licensing system destroys freedom to deal in so-called "ethyl gasoline," either with or without the trade name and trade-mark attached to it. This scheme cannot be excused as an effort to protect the value of the trade-mark.

Appellant cites *Coca-Cola Co.* v. *Bennett,* 238 Fed. 513 (C. C. A. 8th), and *Coca-Cola* v. *Butler & Sons,* 229 Fed. 224 (District Court, E. D., Arkansas, W. D.), as supporting its position. Both cases are merely authority for the proposition that where one has a valid trade name he may prevent its unauthorized use by others in suits for infringement. We have no quarrel with that rule. But we believe that those cases and *Coca-Cola Co.* v. *Koke Co.,* 254 U. S. 143, clearly indicate that a

corollary to the rule is that a trade-mark does not sanction interference with dealing in an article that does not bear the trade-mark. In the instant case the licensing scheme is intended to prohibit all dealing in lead-treated gasoline with a certain octane rating unless appellant's trade-mark is used, and then to control that dealing if the trade-mark is used. This kind of a scheme cannot be defended as necessary to protect the trade-mark.

In any event, it is highly doubtful if appellant has a valid trade-mark. The display of the asserted trade-mark on gasoline pumps does not, and is not intended to, denote the origin of the motor fuel, since the motor fuel originates with the various refiners and not with appellant who owns the trade-mark. All that the mark indicates is that one of the ingredients of the fuel is ethyl fluid and that the fuel is of high quality (R. 40–41). Appellant's arguments on this point implicitly recognize that the trade-mark claimed is descriptive of quality and not of origin. Repeatedly in appellant's brief the trade-mark is coupled with the idea of quality and the contention made that the trade-mark must be protected to maintain quality.[35] The rule is established that a trade-mark to be valid must denote the origin of the product and is insufficient if merely descriptive of the product, its qualities, ingredients, or characteristics. *Manufacturing Co.* v. *Trainer*, 101 U. S. 51; *Lawrence M'f'g*

[35] See appellant's brief, pages 52, 53, 58, and 59.

Co. v. *Tennessee M'f'g Co.*, 138 U. S. 537; *Columbia Mill Co.* v. *Alcorn*, 150 U. S. 460. Thus, the trade-mark which appellant claims lacks the very qualities which are essential to its validity.[36]

However, if it be assumed that appellant's trade-mark is valid and entitles appellant to some privileges, those privileges can be no greater than the privileges conferred by the patents which appellant holds. The differences between patents and trade-marks have led the courts to emphasize that the rights accruing from a trade-mark are much more limited and confined than those flowing from a patent. *Bourjois & Co.* v. *Katzel*, 260 U. S. 689; *Dover Stamping Co.* v. *Fellows*, 40 N. E. 105 (Mass. 1895). If appellant cannot justify its activities on the basis of its patent claims, there is no need to consider what the effect of its trade-mark may be.

D. THE USE OF THE LICENSING SYSTEM TO EXCLUDE JOBBERS FROM THE MARKET BECAUSE THEY CUT PRICES IS AN ABUSE OF THE PATENT PRIVILEGE

Appellant admits that it excludes from the market jobbers whom it regards as "notorious price cutters" (appellant's brief, p. 72). It also concedes that the reason it excludes these jobbers is because it wishes to prevent them from depressing the price of lead-treated gasoline. This concession is im-

[36] Even if the trade-mark were valid originally, it may well be that its compulsory use by appellant's licensees has rendered it *publici juris* and deprived appellant of the right even to prevent its use by others without its consent. *Everett O. Fisk & Co.* v. *Fisk Teachers' Agency*, 3 F. (2d) 7.

plicit in appellant's defense of its policy of excluding "price cutters." That defense is that unless the "price cutters" are excluded, they will depress the price to the injury of appellant's interests. Therefore, on appellant's own showing, the exclusion is pointless unless it operates to prevent the kind of competition which lowers prices. It is apparent that the exclusions of jobbers for this purpose are not isolated and infrequent incidents. The exclusions are a part of a systematic plan which appellant contends is necessary to protect its interests. We submit that this is an abuse of the patent privilege. A patentee is not entitled to combine with others to deny access to the market to persons who do not accept his economic theories as to the undesirability of price competition.

It may be true that a trader, acting alone, has the right to select the parties with whom he will deal. *United States* v. *Colgate & Co.*, 250 U. S. 300. But the action of appellant in denying jobbers access to the market cannot be justified under this rule. Here appellant has combined with 123 refiners to close the market completely to any person whose price policy appellant does not approve. This is not an exercise of one trader's independent judgment. It is the kind of combination or organized boycott which this Court has consistently held to be illegal. *Dr. Miles Medical Co.* v. *Park & Sons Co.*, 220 U. S. 373; *United States* v. *Schrader's Son, Inc.*, 252 U. S. 85; *Federal Trade Comm.* v. *Beech-Nut Co.*, 257 U. S. 441.

In *Federal Trade Comm.* v. *Beech-Nut Co.*,[37] 257 U. S. 441, this Court condemned a coercive price-fixing scheme, which was defended, as appellant defends its licensing plan here, on the ground that

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[37] In this case a manufacturer fixed resale prices for its products. It declined to sell its products to jobbers, wholesalers, or retailers who did not observe these prices or who sold to others who failed to do so. It enforced this price maintenance plan by an elaborate espionage system. The operation of the plan was described by this Court in these words (257 U. S. at page 454):

> The system here disclosed necessarily constitutes a scheme which restrains the natural flow of commerce and the freedom of competition in the channels of interstate trade which it has been the purpose of all the anti-trust acts to maintain. In its practical operation it necessarily constrains the trader, if he would have the products of the Beech-Nut Company, to maintain the prices "suggested" by it. If he fails so to do, he is subject to be reported to the company either by special agents, numerous and active in that behalf, or by dealers whose aid is enlisted in maintaining the system and the prices fixed by it. Furthermore, he is enrolled upon a list known as "Undesirable—Price Cutters," to whom goods are not to be sold, and who are only to be reinstated as one whose record is "clear" and to whom sales may be made upon his giving satisfactory assurance that he will not resell the goods of the company except at the prices suggested by it, and will refuse to sell to distributors who do not maintain such prices.

This Court held that the plan violated the Sherman Act and was an unfair method of competition within the meaning of the Federal Trade Commission Act.

Appellant suggests that this case is no longer law because of the Miller-Tydings amendment to the Sherman Act (appellant's brief, p. 64, footnote 36). That amendment permits price maintenance contracts made under appropriate state legislation to apply to goods moving in interstate commerce. It does not apply unless the contracting parties properly rely upon some state legislation. Appellant makes no claim in this case that its licensing system is based upon any state laws.

it was an exercise of the right to select customers. This Court said (pages 452–453):

> * * * it is settled that in prosecutions under the Sherman Act a trader is not guilty of violating its terms who simply refuses to sell to others, and he may withhold his goods from those who will not sell them at the prices which he fixes for their resale. He may not, consistently with the act, go beyond the exercise of this right, and by contracts or combinations, express or implied, unduly hinder or obstruct the free and natural flow of commerce in the channels of interstate trade.

Appellant is in no better position if it attempts to justify its exclusion of price cutters as a proper exercise of the patent privilege. To succeed in this defense appellant must establish that the exclusion is a reasonable and proper method of securing its pecuniary reward under the patents. *United States* v. *General Electric Co.*, 272 U. S. 476. Appellant's reward from the patents consists of the price which it receives for the patented fluid. It therefore becomes necessary for appellant to establish a direct and substantial relationship between the price of the gasoline which it is seeking to control and the proceeds it receives from the sale of the patented fluid. That relationship does not exist.

Appellant attempts to establish this connection by emphasizing the "suspicion and ill will" which is created by price cutters (appellant's brief, p. 67), the "demoralizing potentialities" of undesirable

price competition (*id.* at p. 68) and the necessity of preventing price cutting which will "undermine" the patentee's trade (*id.* at p. 65). These conditions do not affect appellant's trade, which is the manufacture and sale of the patented fluid; they affect trade in gasoline, a product which appellant does not manufacture or sell. The disorderly market conditions which appellant professes to fear would doubtless directly affect the refiners, and the price stabilization which appellant thinks desirable might well be of benefit to the refiners. This is not a legal justification which permits appellant to combine with the refiners and to use its patent privilege for their benefit in the expectation that it, in turn, will receive some indirect advantage.[38]

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[38] The situation in *Dr. Miles Medical Co.* v. *Park & Sons Co.*, 220 U. S. 373, was analogous. There it was argued that a price maintenance scheme indirectly benefited the manufacturer by conferring advantages upon the retailers. The Court, in disposing of this argument, said (pages 407–408):

> The bill asserts the importance of a standard retail price and alleges generally that confusion and damage have resulted from sales at less than the prices fixed. But the advantage of established retail prices primarily concerns the dealers. The enlarged profits which would result from adherence to the established rates would go to them and not to the complainant. It is through the inability of the favored dealers to realize these profits, on account of the described competition, that the complainant works out its alleged injury. If there be an advantage to a manufacturer in the maintenance of fixed retail prices, the question remains whether it is one which he is entitled to secure by agreements restricting the freedom of trade on the part of dealers who own what they sell.

See also *Interstate Circuit* v. *United States*, 306 U. S. 208, 228–230.

Appellant, in its brief, presents *a priori* arguments designed to prove that even though the impact of price competition in the sale of gasoline will first strike the refiners, it will ultimately affect appellant's return from the sale of the patented fluid. Judged even by *a priori* standards these arguments are unsound. They all proceed on the theory that decreases in the price of gasoline will injure appellant's interests. It is well known that the demand for gasoline is elastic and increases when the price goes down. It is as reasonable to conclude that a decrease in the price of gasoline would increase volume and, in turn, increase the sale of the patented fluid and appellant's financial return as it is to accept appellant's prophecies of disaster.

But, in any event, something more substantial than *a priori* reasoning is required to justify a restraint of trade as drastic and far reaching as appellant's licensing system. Under the Sherman Act the owner of a patent cannot superimpose his notions as to the economic undesirability of price competition upon an entire industry. We have seen that even in the case of the patented article he cannot sell the article and then control the price of all subsequent sales though his economic interests may be affected by those sales (see page 50, *supra*). When he grants a license to another to manufacture and sell, there are limits beyond which he cannot go in attempting to control the price of the articles manufactured and sold under the license. This Court has held that if the patentee is engaged in

manufacturing and selling the article, he may fix the price at which his licensee shall sell. *United States* v. *General Electric Co.*, 272 U. S. 476; *Bement* v. *National Harrow Co.*, 186 U. S. 70. But his right to place such restrictive provisions in the license depends entirely upon the fact that the price at which his licensee sells will "necessarily affect the price at which he can sell his own patented goods." *United States* v. *General Electric Co.*, 272 U. S. 476, 490.

The doctrine of that case is not wide enough to accommodate appellant's system. Appellant is attempting to control the price of an article which it does not manufacture or sell. It is attempting to control the price and the marketing of an article after it has left the hands of its licensee. It attempts to enforce this control by licensing under patents for whose use it collects no royalty or license fee. Finally it makes this attack upon free competition in a case where there is no evidence that the price or the marketing it seeks to control can directly and substantially affect appellant's financial return in any way. To sanction appellant's licensing system would be to extend the patentee's rights far beyond the limits marked out by this Court in *United States* v. *General Electric Co.*, 272 U. S. 476.

Appellant seems to distinguish between a policy of refusing to deal with "price cutters" who apply for licenses and a policy of refusing to continue licenses because the licensees cut prices. Appellant

in effect concedes that it could not legally adopt the policy of cancelling existing jobber licenses because of price cutting (appellant's brief, p. 70, footnote 41). This concession is fatal to appellant's argument that its patents entitle it to exclude "price cutters" from the market. There is no valid distinction in fact between refusing a license because the applicant is a "price cutter" and cancelling a license on the same ground. In both cases the purpose is to maintain prices. If, as appellant appears to believe, it cannot cancel a license for price cutting, it must follow that it cannot combine with others to exclude jobbers from the market for the same reason.

Appellant also refers to its desire to maintain its good will and the quality of its product. But the product whose price it is attempting to protect is not its product but that of the refiners. In any event, while these may be commendable objectives they do not enlarge the scope of the patent privilege. Every trader wishes to maintain his good will and the quality of his product, and competitive conditions often make it difficult for him to do so. Nevertheless, he has no right to combine with others to dominate a market and to exclude persons from that market whose competitive practices he regards as undesirable. In this respect the owner of a patent stands on no different footing from any other trader. He may protect his good will and the quality of his product but he must do so by legal methods. Cf. *International Machines Corp.* v. *United States*, 298 U. S. 131, 138–139.

IV

THE DECREE OF THE COURT BELOW IS PROPERLY DESIGNED TO GIVE EFFECTIVE RELIEF AND SHOULD NOT BE MODIFIED

Appellant argues at some length that the decree entered by the court below was too drastic and was not justified by the evils found to exist. In substance, the contention is that some other form of decree could have been drafted which would have accomplished the purpose and would have been more palatable to the appellant.

The District Court's objection to appellant's conduct lay in the fact that appellant had, through agreements with refiners, excluded jobbers from the market. For the reasons set forth at pages 36–46, *supra,* we submit that the scheme was much more far-reaching and was in reality a scheme for maintaining the resale price of gasoline and for compelling the jobbers to comply with the price policies of the major oil companies. In either view the device adopted was the jobber licensing system and that system was the means by which the purpose was accomplished. The licenses issued to refiners specifically provided that lead-treated motor fuel should be sold only to jobbers licensed by appellant. Thus the restrictive agreement came into existence and its successful operation was dependent upon appellant's licensing jobbers. By granting and refusing licenses to jobbers and by exercising the authority which those licenses purported to confer upon it, appellant used the tools of its own forging to dominate and control the marketing

of lead-treated gasoline. By its own admission this scheme was conceived "to ensure that the Ethyl Gasoline Corporation would have some control and part in the sale and distribution of this gasoline" (R. 164). That the jobber licensing system has served the purpose for which it was created is clear from the evidence. So long as the jobber licensing system is in effect, no matter how modified, the opportunity for abuse will be continuous and insistent. Foresight requires that all possibility of continuance along the illegal course should be removed. This can be effectively accomplished only by taking from appellant the means by which the scheme has been carried out, *i. e.*, the jobber licensing system.

It is well settled that in enforcing the antitrust laws the courts will frame a decree broad enough to prevent evasion and will resolve any doubts against the wrongdoer. In *Local 167* v. *United States*, 291 U. S. 293, this Court said (page 299):

> The United States is entitled to effective relief. To that end the decree should enjoin acts of the sort that are shown by the evidence to have been done or threatened in furtherance of the conspiracy. It should be broad enough to prevent evasion. In framing its provisions doubts should be resolved in favor of the Government and against the conspirators. *Warner & Co.* v. *Lilly & Co.*, 265 U. S. 526, 532.

Appellant argues that the decree should have been limited to enjoining the particular restraints

imposed and to enjoining specific activities in connection with the licensing system. In *Gompers* v. *Bucks Stove & Range Co.*, 221 U. S. 418, it was said (pages 438–439):

> To hold that the restraint of trade under the Sherman anti-trust act, or on general principles of law, could be enjoined, but that the means through which the restraint was accomplished could not be enjoined would be to render the law impotent.

The foregoing rules are clearly applicable to the instant case. There can be no question but that the jobber licensing system was the means by which the restraint of trade here charged was carried out and made effective. The belief is widespread in the industry that appellant compels its jobber licensees to maintain resale prices and to refrain from price competition. In such circumstances the only practical remedy is to strike down the scheme in its entirety. No other decree will suffice to assure jobbers that they are completely free of domination and free to engage in the competition which is protected by the antitrust laws.[39]

Appellant urges that the abolition of the licensing system will prevent it from enforcing various

[39] In its brief appellant suggests that the court cannot "foresee all of the future problems" and that changes in appellant's operations or in conditions in the industry may make the decree unduly burdensome (appellant's brief, p. 79). We submit that this Court should not modify the decree on the basis of speculations as to hypothetical conditions. If changes of the kind described by appellant take place in the future and the decree is unduly burdensome, the appellant is free to apply to the district court for any necessary modification.

other restrictions relating to health regulations, the maintenance of the quality of its product, and the protection of its trade-mark privileges. These, it asserts, are legitimate restrictions which it is entitled to impose and which it can enforce only through the jobber licensing system. Neither conclusion is sound.

But even assuming that the various incidental restrictions in the licenses bear some remote relationship to the protection of appellant's legitimate interests, there can be no question but that the Court could properly strike down the entire system, including the incidental restrictions. The power of the Court to do so is not unlike the power of the legislature to prohibit innocuous activities when in its judgment the prohibition is essential to the accomplishment of its principal purpose.[40] The principal purpose of the decree in this case is to prevent appellant from continuing to restrain trade by means of the jobber licensing system. As we have pointed out, the only effective way to accomplish this result is to prevent the use of the system.

The mere fact that appellant may be satisfied with the jobber licensing system as a means of securing the protection to which it says it is legitimately en-

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[40] In *Purity Extract Co.* v. *Lynch*, 226 U. S. 192, this Court said (page 201):

> It does not follow that because a transaction separately considered is innocuous it may not be included in a prohibition the scope of which is regarded as essential in the legislative judgment to accomplish a purpose within the admitted power of the Government. *Booth* v. *Illinois*, 184 U. S. 425; *Otis* v. *Parker*, 187 U. S. 606; *Ah Sin* v. *Wittman*, 198 U. S. 500, 504; *New York ex rel. Silz* v. *Hesterberg*, 211 U. S. 31; *Murphy* v. *California*, 225 U. S. 623.

titled is no excuse for having cloaked an illegal restraint of trade under the guise of protecting its interests. We submit that in view of appellant's past conduct it should not be allowed to retain so powerful an economic weapon regardless of the purpose for which it is to be used.

By appellant's own admission appellant has heretofore attempted to keep its records and otherwise to conduct its business in such a way as to conceal the true purpose of the licensing plan. The plea for modification of the decree comes with little force in view of this record of secrecy and concealment. So long as the plan exists in any form the opportunity for similar stratagems will continue to exist. The government should not be required continually to police the administration of a licensing plan which presents inherent opportunities for misuse. The relief granted should be complete and final.

CONCLUSION

We respectfully submit that the decree of the court below should be affirmed.

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FEBRUARY 1940.

U. S. GOVERNMENT PRINTING OFFICE: 1940

SUPREME COURT OF THE UNITED STATES.

No. 536.—October Term, 1939.

Ethyl Gasoline Corporation, Earle W. Webb and John Coard Taylor, Appellants,

vs.

The United States of America.

Appeal from the District Court of the United States for the Southern District of New York.

[March 25, 1940.]

Mr. Justice Stone delivered the opinion of the Court.

The Government brought this suit in the District Court for Southern New York, to restrain appellant, Ethyl Gasoline Corporation, a Delaware corporation, and the other appellants, who are its officers, from granting licenses, under patents controlled by it, to jobbers to sell and distribute lead-treated motor fuel, and from enforcing provisions in licenses to oil refiners which restrict their sale of the motor fuel to the licensed jobbers, as violations of the Sherman Anti-trust Act. 26 Stat. 209, 15 U. S. C. § 1, as amended August 17, 1937, 50 Stat. 693. The trial court granted the relief sought and from its decision in favor of the Government the case comes here on direct appeal under the provisions of § 2 of the Expediting Act of February 11, 1903, as amended 36 Stat. 1167, 15 U. S. C. § 29; § 238 of the Judicial Code, as amended 43 Stat. 938, 28 U. S. C. § 345.

The case was tried on an agreed statement of facts which was incorporated in the findings of the trial court and, except as noted, there is no dispute as to the facts. The appellant corporation is engaged in the manufacture and sale of a patented fluid compound containing tetraethyl lead, a poisonous substance, which, when added to gasoline used as a motor fuel, increases the efficiency of high pressure combustion engines in which the fuel is consumed. The Ethyl Corporation owns two patents covering the composition of the fluid, No. 1,592,954 of July 20, 1926, and No. 1,668,022 of May 1, 1928. It has a third patent, No. 1,573,846 of February 23, 1926, claiming a motor fuel produced by mixing gasoline with the

patent fluid compound, which is claimed also by the two patents first mentioned. It also has a patent, No. 1,787,419, of December 30, 1930, claiming a method of using fuel containing the patented fluid in combustion motors. The corporation manufactures and sells the patented fluid to oil refiners, solely for use in the production of the improved type of motor fuel. It issues licenses under its patents to refiners and to jobbers of motor fuel on terms and conditions presently to be noted, but it does not charge or receive any royalty for its licenses. It derives its profit solely from the sale of the patented ethyl fluid to its refiner licensees.

The Licensing Agreements.

Appellant grants licenses under its patents to most of the large oil refining companies in the United States, to manufacture, sell and distribute motor fuel containing the patented fluid. The licenses provide that appellant will sell to the licensees their requirements of the patented fluid. They prohibit the licensees from selling the manufactured product to any except to other licensed refiners, to jobbers licensed by appellant and to retail dealers and consumers. They require the licensed refiners to mix the patented fluid with the gasoline at their refineries with equipment approved by appellant and in conformity to regulations promulgated by the Surgeon General of the United States and any other governmental body having jurisdiction. The refiners agree to impose obligations on all purchasers to conform to such health regulations and to require them to impose like obligations on those to whom they sell. The refiners agree, upon notice by appellant, to discontinue sales to other refiners or jobbers whose licenses appellant has cancelled. The licenses also provide for the maximum amount of the fluid to be used in the gasoline; and that, within that limit, the licensees' regular or "best non-premium" gasoline shall have a maximum octane rating of 70[1] and shall be sold as the next

[1] The utility of lead-treated gasoline for use in high compression engines is expressed in terms of octane numbers, an arbitrary scale of measurement indicating the relative degree of compression to which the fuel may be subjected without causing "knock" in the engine, which is prevented or reduced by the use of the fuel. The octane rating of motor fuel increases with the amount of the patented fluid added to the gasoline which, in any case, is small. Appellant's licenses to refiners authorize the manufacture of gasoline of high octane rating, 68 or more, of two classes, "regular", in which there is one part of tetraethyl lead to 4200 parts of gasoline, and "ethyl gasoline", in which there is one part of tetraethyl lead to 1700 parts of gasoline.

highest priced motor fuel of the licensee below the licensee's ethyl gasoline, which shall have a minimum octane rating of 76 and shall be sold at a certain fixed price differential above the average net sales price of the licensees' best non-premium grade of commercial gasoline. The licenses further provide the conditions under which the name of the Ethyl Corporation and its trademark or trade names may be used in connection with the advertising and sale of the patented motor fuel.[2]

Jobbers are generally required by appellant to apply for licenses through the refiners from whom they expect to purchase the motor fuel. The licenses to jobbers purport to grant the right to sell and deliver to retail dealers and consumers within a specified territory regular and ethyl gasoline, manufactured and sold by a designated licensed refiner.[3] The licensed jobbers are required to furnish appellant monthly with a list of all places at which the motor fuel is sold under the licenses. They agree to comply with health regulations relating to the handling of the motor fuel promulgated by the Surgeon General or other governmental agency; to post and distribute any notices concerning the handling of such fuel as required by the appellant; to permit physical examination of employees, and to require customers purchasing for resale to assume similar obligations. Adulteration and dilution of motor fuel distributed under the licenses is prohibited, and requirements similar to those contained in refiner licenses are imposed with respect to the use of appellant's corporate name and trade names in connection with the advertising and sale of the motor fuel. Appellant is given the right to cancel the jobbers' licenses at any time for failure to comply with their terms, and either party may cancel, with or without cause, on thirty days' written notice.

Effect of the Licensing Agreements on the Oil Industry.

The licensing system established by appellant affects and controls the business of the major part of those engaged in manufacturing

2 The name of the Ethyl Corporation and its trademark or trade names "Ethyl" and "Q" may not be used in connection with the advertising and sale of regular gasoline. All the licensees, with the exception of the Standard Oil Company of New Jersey, which markets the product under the name "Esso", are required to use the word "Ethyl" in connection with the sale and distribution of the Ethyl gasoline.

3 The only obligation which the licensor assumes toward the jobbers is to defend them against patent and trademark infringment suits.

and distributing motor fuel oil in the United States. Appellant issues licenses to 123 refiners, including every leading oil company, except one, the Sun Oil Company, which does not generally do business through jobbers. They refine 88% of all gasoline sold in the United States, and the gasoline processed by them under the license agreements is 70% of all the gasoline thus sold, and 85% of all gasoline processed to obtain a high octane rating.

Any jobber in the United States desiring to sell lead-treated gasoline must secure a license from the Ethyl Corporation, revocable at its will, before it can procure the gasoline from licensed refiners. Of the 12,000 jobbers doing business in the United States approximately 11,000 are licensed by appellant. The jobber must procure a new license on changing his source of supply. The greater part of all gasoline treated with the patented fluid is sold and transported in interstate commerce. It is sold in part through wholesale and retail outlets owned and controlled by the refiners and in part to individual retailers and consumers. A large volume and a substantial part of the whole is distributed through licensed jobbers to whom it is delivered at their bulk storage plants through the channels of interstate commerce.

By their terms, the licensing agreements serve to exclude all unlicensed jobbers from the market, and in the particulars already mentioned, and in others presently to be discussed, they control the conduct of the business of licensed jobbers in the distribution of the patented motor fuel and enable appellant at will to exclude others from the business The refiners' licenses also in terms place restraints on the sales price of refiners by establishing the prescribed differential between regular and ethyl gasoline. From this and from the other stipulated facts the Government argues that the control acquired through the licensing agreements over the refiners and jobbers has been used by appellants to control the business practices of the jobbers and particularly to maintain resale prices of the patented motor fuel in unlawful restraint of interstate commerce. In support of this contention it relies upon the long established practice of appellant to refuse to grant licenses to jobbers who cut prices or refuse to conform to the marketing policies and posted prices of the major refineries or the market leaders among them.

Decision Below and Contentions of Appellants.

The trial court concluded that in view of the indefinite language of the stipulation it was perhaps a permissible, though not a necessary conclusion that an agreement or understanding for the maintenance of prices existed between the appellant and the jobber licensees. But it considered it unnecessary to decide this issue, since it found that the appellant's licensing practices affecting the jobbers, in conjunction with the agreements and cooperation of the licensed refiners, had been used by appellant as the means of excluding from the market the unlicensed jobbers who do not conform to the market policies and posted gasoline prices adopted by the major oil companies or the market leaders among them, and that appellant uses the control thus established to coerce adherence to those policies and prices generally by the licensed jobbers, and that this restriction upon the industry effected through the license contracts with refiners and jobbers was not within appellant's patent monoply, and operated unreasonably to restrain interstate commerce in the processed gasoline.

It concluded that the licensing system was not, as appellant argues, necessary for the protection of such legitimate interests as the patentee had in the protection of the quality of the treated gasoline sold upon the market, and its use by the jobbers with safety to the public health. Appellants were accordingly enjoined from enforcing or attempting to enforce, or including in any subsequent agreement provisions that refiners shall sell lead-treated gasoline only to licensed jobbers, and from requiring or attempting to require jobbers to secure licenses, and from enforcing or attempting to enforce the provisions of any outstanding jobber licenses. The decree also declared the jobber licenses illegal and required appellant to notify the jobbers that the licenses have been cancelled.

Appellant, insisting that it does not use the jobbers' licensing system to maintain prices, makes two principal attacks on the decree. It urges that the licensing of the refiners and jobbers, the restraints upon the sale of the patented fuel by the refiners, and the restrictions placed upon the jobbers, are all reasonably necessary for the commercial development of appellant's patents and for insuring a financial return from them, and are therefore within its patent monopoly. In any case, it is said that the conditions attached to the refiners' and jobbers' licenses are appropriate and reasonably adapted to the maintenance of the quality of the product

and for the protection of the public in its use of a product containing a dangerous poison, and both are essential to the maintenance of the market for the patented fuel, on which the market for appellant's patented fluid depends. And since the jobbers' licenses are a necessary or appropriate means of protecting the interests of appellant and the public in the quality and safe use of the patented product, it is argued that the decree abolishing the whole system of jobbers' licenses went further than was necessary or proper to prevent such restraint as there may have been exerted on the jobbers with respect to prices and marketing policies.

Relation of the Licensing Agreements to Price Maintenance.

For the moment we may lay to one side the particular restrictions enumerated in the contracts of the refiners with jobbers, and turn to the relation of appellant's licensing policy to the maintenance of price policies by the jobbers. While the trial court found no contract or agreement which purports to prescribe resale prices or to exact any price policy of the jobbers, the stipulation of facts shows that appellant, through its patents, its contracts, and its licensing policy, has acquired the power to exclude at will from participation in the nationwide market for lead-treated motor fuel all of the 12,000 motor fuel jobbers of the country, by refusing to license any of the 1,000 unlicensed jobbers, or by cancelling, as it may at will, the licenses of any of the 11,000 licensed jobbers. This we assume, for present purposes, it could lawfully do by virtue of the power conferred by its patent to exclude any or all others from selling the patented product. But it does not follow that it can lawfully exercise that power in such manner as to control the patented commodity in the hands of the licensed jobbers who had purchased it, or their actions with respect to it in ways not within the limits of the patent monopoly, and conspicuously among such controls which the Sherman law prohibits and the patent law does not sanction is the regulation of prices and the suppression of competition among the purchasers of the patented articles. That appellant, by the plan and scope of its licensing policy, has acquired vast potential power to accomplish that end cannot be doubted. And we think the record supports the finding of the trial court that appellant has exercised that power continuously for a considerable period as a means of control over the price policies of the licensed jobbers.

From the stipulation of facts, it appears that since 1929 appellant has pursued the practice of investigating, through field agents, the "business ethics" of jobbers applying for licenses, and of rejecting such applications upon the adverse report of the agent. Appellant admits that the phrase "business ethics" is used to denote compliance with "marketing policies and prevailing prices of the petroleum industry", which are the "marketing policies and posted prices of the major oil companies or the market leaders among them". Among these is the Standard Oil Company of New Jersey which owns one-half of the capital stock of the appellant.[4] While not all applicants who have failed to maintain prices and marketing policies have been rejected, the record leaves no doubt that appellant has made use of its dominant position in the trade to exercise control over prices and marketing policies of jobbers in a sufficient number of cases and with sufficient continuity to make its attitude toward price cutting a pervasive influence in the jobbing trade.

In many instances, although not in all, an adverse report by the investigator as to the applicant's business ethics has been the sole ground for rejecting his application, and appellant admits that the greater number of applications for licenses which have been denied were rejected because of such an adverse report. In the cases in which licenses have been refused, something less than one-half of the rejected applicants were later granted licenses on their assurance that their marketing practices would be changed. The total number of rejections for failure to comply with that standard does not appear, for appellant has failed to keep any record of the ground of rejection of applications for licenses, admittedly because it is reluctant to preserve in its records "the extent to which maintenance of prices and marketing policies by jobbers entered into the granting of licenses."

Jobbers' licenses do not appear to have been cancelled because of failures to maintain policies or prices of the major oil companies whenever they have occurred, but it is an established practice of appellant to investigate the business ethics of licensed jobbers in order to ascertain whether they maintain the ~~marketing prices, policies~~ and

[4] The remainder is owned by General Motors Corporation and E. I. du Pont de Nemours Company.

practices prevailing or ostensibly prevailing in the industry. Representatives of appellant have from time to time, but not in every case, reported a jobber to his supplier or refiner for not maintaining the marketing policies of the latter, and in some cases they have united in persuading the jobber to mend his ways. Appellant has generally required each licensed jobber to purchase all his treated fuel from a single refiner and in some instances has refused a license to jobbers who wished to change their source of supply from one licensed refiner to another.

These long-continued practices have had the effect upon the industry naturally to be expected. Large numbers of refiners and the majority of jobbers believe that the jobbers must maintain the required business ethics in order to obtain licenses, and a number of licensed jobbers believe that they are required by appellant's licensing practices to maintain prices and abide by the marketing practices of the major oil companies. Appellant, in its printed instructions to field representatives as to the manner of conducting investigations of licensed jobbers, after pointing out that one of the reasons for the investigation of the jobber before the issuance of the license is to insure that he "will not resort to unethical methods in competing with our other licensed jobbers and refiners," and after describing the methods of conducting the investigation,[5] sums up the result as follows: "We have, through these supplemental investigations, been able to correct the ethyl picture to a considerable extent, and have succeeded in eliminating from our jobber lists some of our former accounts who were not a credit to us as licensees of the Ethyl Gasoline Corporation".

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[5] The investigator is reminded, in the *Field Representative Manual* that the question as to "business ethics" "can be answered only if the field representative has obtained sufficient information to be sure of his opinion". "Ethics of the jobber is based on the territory in which he is marketing and the conditions surrounding the sale of gasoline by other ethyl gasoline distributors. Care should be taken, if possible, to find out the instigator of any practices which tend to unfair competition. Business ethics is a relative quality and no hard and fast rule can be given to govern all cases. Information given to field representatives and picked up in the various contacts should be weighed carefully before a final decision is reached. One of the three words, 'good', 'questionable', or 'unethical' is to be used in answering this question."

In January, 1935 the question as to "business ethics" was eliminated from the form report of field agents. But business ethics has since continued to be one of the principal subjects of investigation and, as before, the result of the field agent's investigation has been included in his report and his recommendations have been generally accepted and acted upon by his superiors.

Scope of the Patent Monopoly.

It is not denied, and could not well be, that if appellant's comprehensive control of the market in the distribution of the lead-treated gasoline, as disclosed by the record, had been acquired without aid of the patents, but wholly by the contracts with refiners and jobbers, such control would involve a violation of the Sherman Act. *Paramount Famous Corp.* v. *United States*, 282 U. S. 30, 43; *United States* v. *First National Pictures, Inc.*, 282 U. S. 44. Cf. *Frey & Son, Inc.* v. *Cudahy Packing Co.*, 256 U. S. 208; *Federal Trade Commission* v. *Beech-Nut Packing Co.*, 257 U. S. 441. And so we turn to the consideration of the patents and the patent law to ascertain whether the monopoly which they have given appellant affords a lawful basis for the control over the marketing of motor fuel which the record discloses. Cf. *United States* v. *General Electric Co.*, 272 U. S. 476. In considering that question we assume the validity of the patents, which is not questioned here.

The patent law confers on the patentee a limited monopoly, the right or power to exclude all others from manufacturing, using, or selling his invention. R. S. § 4884, 35 U. S. C. § 40. The extent of that right is limited by the definition of his invention, as its boundaries are marked by the specifications and claims of the patent. *Motion Picture Patents Co.* v. *Universal Film Co.*, 243 U. S. 502, 510. He may grant licenses to make, use or vend, restricted in point of space or time, or with any other restriction upon the exercise of the granted privilege, save only that, by attaching a condition to his license he may not enlarge his monopoly and thus acquire some other which the statute and the patent together did not give.

He may not, by virtue of his patent, condition his license so as to tie to the use of the patented device or process the use of other devices, processes or materials which lie outside of the monopoly of the patent licensed; *Motion Picture Patents Co.* v. *Universal Film Mfg. Co., supra; Carbice Corporation* v. *American Patents Corporation*, 283 U. S. 27, 31; *Leitch Manufacturing Co.* v. *Barber Co.*, 302 U. S. 458; cf. *United Shoe Machinery Co.* v. *United States*, 258 U. S. 451, 462; *International Business Machines Corp.* v. *United States*, 298 U. S. 131, 140; or condition the license so as to control conduct by the licensee not embraced in the patent mon-

opoly, *Standard Sanitary Mfg. Co.* v. *United States*, 226 U. S. 20; *Interstate Circuit, Inc.* v. *United States*, 306 U. S. 208, 228-230; or upon the maintenance of resale prices by the purchaser of the patented article. *Adams* v. *Burke*, 17 Wall. 453; *Bobbs-Merrill Co.* v. *Straus*, 210 U. S. 339; *Dr. Miles Medical Co.* v. *John D. Park & Sons Co.*, 220 U. S. 373; *Bauer & Cie* v. *O'Donnell*, 229 U. S. 1; *Straus* v. *Victor Talking Machine Co.*, 243 U. S. 490; *Boston Store of Chicago* v. *American Graphophone Co.*, 246 U. S. 8; cf. *United States* v. *General Electric Co., supra*, 485.

Appellant, as patentee, possesses exclusive rights to make and sell the fluid and also the lead-treated motor fuel. By its sales to refiners it relinquishes its exclusive right to use the patented fluid and it relinquishes to the licensed jobbers its exclusive rights to sell the lead-treated fuel by permitting the licensed refiners to manufacture and sell the fuel to them. And by the authorized sales of the fuel by refiners to jobbers the patent monopoly over it is exhausted, and after the sale neither appellant nor the refiners may longer rely on the patents to exercise any control over the price at which the fuel may be resold. *Adams* v. *Burke, supra; Bobbs-Merrill Co.* v. *Straus, supra; Bauer & Cie* v. *O'Donnell, supra; Motion Pictures Patents Co.* v. *Universal Film Co., supra.*

The picture here revealed is not that of a patentee exercising its right to refuse to sell or to permit his licensee to sell the patented products to price-cutters. Compare *United States* v. *Colgate & Co.*, 250 U. S. 300 with *United States* v. *A. Schrader's Son, Inc.*, 252 U. S. 85. A very different scene is depicted by the record. It is one in which appellant has established the marketing of the patented fuel in vast amounts on a nationwide scale through the 11,000 jobbers and at the same time, by the leverage of its licensing contracts resting on the fulcrum of its patents, it has built up a combination capable of use, and actually used, as a means of controlling jobbers' prices and suppressing competition among them. It seems plain that this attempted regulation of prices and market practices of the jobbers with respect to the fuel purchased, for which appellant could not lawfully contract, cannot be lawfully achieved by entering into contracts or combinations through the manipulation of which the same results are reached by the exercise of the power which they give to control the action of the purchasers. Such contracts or

combinations which are used to obstruct the free and natural flow in the channels of interstate commerce of trade even in a patented article, after it is sold by the patentee or his licensee, are a violation of the Sherman Act. *Federal Trade Commission* v. *Beech-Nut Company, supra,* 453; *United Shoe Machinery Co.* v. *United States, supra; Victor Talking Machine Co.* v. *Kemeny,* 271 Fed. 810, 817; cf, *United States* v. *A. Schrader's Son, Inc., supra.* Agreements for price maintenance of articles moving in interstate commerce are, without more, unreasonable restraints within the meaning of the Sherman Act because they eliminate competition, *United States* v. *Trenton Potteries Co.,* 273 U. S. 392, and agreements which create potential power for such price maintenance exhibited by its actual exertion for that purpose are in themselves unlawful restraints within the meaning of the Sherman Act, which is not only a prohibition against the infliction of a particular type of public injury but "a limitation of rights which may be pushed to evil consequences and therefore restrained". *Standard Sanitary Mfg. Co.* v. *United States, supra,* 49; *American Column Co.* v. *United States,* 257 U. S. 377, 400; *United States* v. *American Linseed Oil Co.,* 262 U. S. 371; *United States* v. *Trenton Potteries Co., supra,* 397, 398.

The extent to which appellant's dominion over the jobbers' business goes beyond its patent monopoly, is emphasized by the circumstances here present that the prices and market practices sought to be established are not those prescribed by appellant-patentee, but by the refiners. Appellant neither owns nor sells the patented fuel nor derives any profit through royalties or otherwise from its sale. It has chosen to exploit its patents by manufacturing the fluid covered by them and by selling that fluid to refiners for use in the manufacture of motor fuel. Such benefits as result from control over the marketing of the treated fuel by the jobbers accrues primarily to the refiners and indirectly to appellant, only in the enjoyment of its monopoly of the fluid secured under another patent. The licensing conditions are thus not used as a means of stimulating the commercial development and financial returns of the patented invention which is licensed, but for the commercial development of the business of the refiners and the exploitation of a second patent monopoly not embraced in the first. The patent monopoly of one invention may no more be enlarged for the exploitation of a monopoly of another, see *Standard Sanitary*

Mfg. Co. v. *United States, supra,* than for the exploitation of an unpatented article, *United Shoe Machinery Co.* v. *United States, supra; Carbice Corporation* v. *American Patents Corporation, supra; Leitch Manufacturing Co.* v. *Barber Co., supra; American Lecithin Co.* v. *Warfield Co.,* 105 F. (2d) 207, or for the exploitation or promotion of a business not embraced within the patent. *Interstate Circuit, Inc.* v. *United States, supra,* 228-230.

Protection of Health and Quality of Product.

The trial court was of opinion that such interest as appellant has in protecting the health of the public in connection with the distribution of the fuel, and in preventing adulteration, deterioration and dilution of the motor fuel in the hands of the jobbers may be adequately protected without resort to the jobber license device which has been and is capable of being used for other and illicit purposes. Compare *International Business Machines Corporation* v. *United States, supra,* 139, 140. This conclusion is, we think, amply supported by the record. The precautions taken to protect the public health in the handling of the motor fuel by jobbers and service stations includes the health restrictions imposed on jobbers by the refiners included in their contracts with jobbers, inspections, more or less perfunctory, by representatives of appellant and the posting by jobbers and distributors of notices supplied by appellant stating that the fuel contains lead and is for use as a motor fuel only. These activities are not interfered with by the decree.

There is no authentic instance of injury resulting from the handling of lead-treated gasoline after its manufacture attributable to its lead content. Extensive expert study, carried on under direction of appellant over a perod of years, detailed in the record, resulted in a report that the risk arising from the absorption of lead through the skin in the handling of the lead-treated fuel is so small as to be negligible, and that the use of the fuel made in conformity to the refiners' licenses has not caused or produced any dangers or hazards to health.

The avoidance of such dangers as there may be in the handling of the motor fuel by jobbers and distributors is plainly not beyond control by public health regulations, and would seem, as the district court thought, to be amply secured, in any case, through the self-interest of the refiners in requiring the purchasers

of their gasoline to take proper health precautions including the posting of notices which appellant supplies and by the continuance of appellant's inspection, all of which are permissible under the decree. It is likewise apparent that the interest the appellant has in preventing dilution, adulteration and deterioration of the treated gasoline in the hands of the jobbers may be similarly protected without continued resort to jobber licenses, which is precluded by reason of their use and the danger of their continued use for other and illegal purposes.

Since the unlawful control over the jobbers was established and maintained by resort to the licensing device, the decree rightly suppressed it even though it had been or might continue to be used for some lawful purposes. The court was bound to frame its decree so as to suppress the unlawful practices and to take such reasonable measures as would preclude their revival. *Local 167* v. *United States*, 291 U. S. 293; *Warner & Co.* v. *Lilly & Co.*, 265 U. S. 526, 532. It could, in the exercise of its discretion, consider whether that could be accomplished effectively without disestablishing the licensing system, and whether there were countervailing reasons for continuing it as a necessary or proper means for appellant to carry out other lawful purposes. Since the court rightly concluded that these reasons were without substantial weight, it properly suppressed the means by which the unlawful restraint was achieved. *Local 167* v. *United States*, *supra*, 299, 300; cf. *Merchants Warehouse Co.* v. *United States*, 283 U. S. 501, 513.

Affirmed.

Mr. Justice McREYNOLDS and Mr. Justice ROBERTS took no part in the consideration or decision of this case.

A true copy.

Test:

Clerk, Supreme Court, U. S.